Transfer to CSU 11/15/17 My International Career

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Dedication

To Vicky, my love and life-long companion, and our children Tim and Mike, but with no obligation on their part to read even part of this memoir, and to the memory of Becky and Paul, our departed children.

Preface

One day while having a drink on the patio of our Fort Collins Country Club, Vicky and I were recounting our close call with a mature rhino while on a jungle walk in the lowlands of Nepal known as the Terai. Someone sitting at a table next to us who had been listening said I should write about this adventure. I had been thinking about writing a memoir about our overseas experiences for a long while. So, this was the stimulus I needed. Thus, in May 2004 I began jotting down random thoughts by possible chapters. Now, over 13 years later I finally have completed the last chapter. It has been an interesting exercise.

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MY INTERNATIONAL CAREER

Chapter 1: How it began

It all started with Miss Tillapaugh, my third grade teacher in Cedar Rapids, IA. She stood about five feet, weighed perhaps 150 pounds, had dark bobbed hair and an engaging smile. I especially liked her geography lessons. More than anything she captured my imagination with her pictures of the pyramids of Egypt and the pineapple and sugarcane fields of Hawaii. Entranced, I leaned over to the boy sitting next to me and said, "We'll go to those places someday." On another occasion, I recall her telling us to look closely at the oranges, bananas and other tropical fruit displayed at our corner grocery store and to think how long a journey it was for them to arrive at our store. That too tweaked my imagination about wanting to visit foreign places.

Fast forward to the family's move to Grinnell, a town of 7,000 in central Iowa, as a result of their purchase of a small hotel comprising 40 rooms, a small dining room that they soon closed, and little else. Because Pearl Harbor happened within a few months of the purchase, Dad enlisted in the Navy Band at the Pre-Flight School and was stationed in Iowa City come 70 miles away. Mom took over as manager of the hotel with the help of a maid who made the beds and cleaned the rooms and a part-time handyman to aid in cleaning and stoking the furnace. Except for my occasional help at the desk and otherwise, Mom was virtually on full-time duty 24 hours a day seven days a week. During the long evenings, I would often sit by the radio in the lobby and listen to the evening war news narrated by H. V. Kaltenborn and Gabriel Heater, who often opened with "Ah yes, there's good [or bad] news tonight" as he described Russian resistance to the German army's advance across Russia and subsequent retreat. I traced out on blank paper a crude map of Russia and periodically located the scene of the major battles. In this way my mind lived these battles. I had time for such things at this time, for as an only child in a new town I had lots of time to my self.

During this time I came across The Weeping Wood by Vicki Baum (1943)--a novel about rubber production in Brazil. It cast a lasting memory about the mystery of jungle plantations and the plight of the peasant families laboring there. The thoughts of the steaming Amazon, heavy vegetation, wild animals, and the rustic life of the workers translated into visions of a lush and colorful land. And the thrill of the Latin beat of songs like the *El Manicero* and *Frenesi* added to my enchantment of Latin America. I wanted to go there too. Yes, I was a romantic! I expressed these feelings about travel and life below the border in the several short stories I wrote for my senior creative writing class.¹

¹ By my third year as a senior I had finally established myself in Grinnell: I was captain of our reasonably successful football team (first in a long time) while concurrently gaining All-State honorable mention as a guard, sat second chair trumpet in our fine 100-piece symphonic band, had written the lead of three plays and acted in that and another one for our highschool Creative Writing class, was working for the Railway Express, mowed greens at the country club, pulled corn tassels during long-day sessions for two summers, made good friends with my classmates, and dated some of the more attractive highschool girls, *but* I had held no class office nor did I strive academically not even knowing where I ranked upon graduation.

By the time I was about to turn eighteen, my father had retired from the Navy and had returned home. He encouraged me to enlist rather than being drafted by saying no one in our family had ever been drafted. He thought that by enlisting I had a better chance at choosing the branch of service I wanted, rather than ending up in the infantry. Based on what I had seen at the Pre-flight school I wanted to become a Navy pilot, motivated primarily by the severe physical training program there. So, we as a family drove to the Naval recruiting office in Des Moines only to find out that the Pilot Program was not accepting candidates, but the Naval Crewman program was open. Once in that I could apply for the Pilot Program should opportunities open up there. So, I enlisted in that with the promise that I would not be called up until I had finished high school two months later. But, within two weeks, I got the notice to report right away for indoctrination in Chicago. (Thus, I never formally graduated from highschool, but was granted a degree nevertheless.) From there it was boot camp at the Naval Air Technical Training Center in Memphis followed by several weeks of training in radio-radar technology, which included intensive exposure to Morris Code. During this time, I applied and received word that I would be accepted for the Naval Pilot Program once it opened up again.

But then I pulled a bone-head stunt. One afternoon, a non-com from the base dropped by our barracks. He told those of us standing outside that he had the answers to an upcoming test. "Would anyone of us want them?" *Without thinking* I accepted one of the sheets he passed around. The test was routine and similar to a series we had taken before. I had had no trouble with these and was not anxious about the upcoming test. I was not in the habit of cheating on tests, certainly not in highschool nor earlier; and, I hadn't cheated once in the Navy. *I don't know why I did it, but it was career changing!* After finishing the test without reference to the answers, I reached into my pocked to pull out the slip of paper with the answers on it intending to check against what I had written. That was a mistake. Immediately, the monitor standing behind me grabbed my wrist and said, "Give me what's in your hand," which I did. That led to a Deck Court,² with the imposition of 20 hours of latrine duty and a minor blight on my record. However, within weeks I received written notice simply saying that I had been removed form the Pilots Program because *I had had deck court!*

Swallowing my disappointment and doing the latrines, I continued the training program without further incident. The long hours of taking morris code were not difficult. Eventually, I could copy code while my mind was wandering, not paying attention to what I was writing. With that and the courses in radio and radar technology I ended up in the top five percent of my group, which gave me a choice in selecting where I would receive training next. The options were not many: either the twin-engine, land-based, multi-crew planes at Pensacola or torpedo-dive bomber training in southern Florida. I preferred dive bombers (SB2C) because the radio/radar man sat just behind the pilot under the single canopy. Should that not work out I would become part of a three-man crew in torpedo bombers (TBFs/TBMs). I was willing to run

² The purpose of a deck court is to try enlisted personnel for minor offenses which, however, warrant greater punishment than the Commanding Officer is empowered to impose.

the risk. But I lost, ending up receiving gunnery and flight training in torpedo bombers at Opa-Locka in southern Florida. The strategy protecting the torpedo planes as they approached a naval target was to depend on a simultaneous dive bomber attack aimed at distracting a ship's attention while the torpedo bombers made their long run just above the water.

Although there were a few accidents during training the events were not close to us, so the crews of our five planes were not overly concerned. For my part, I weathered the uncertainty by not thinking much about the future. However, our group did experience one scary event when our five planes, flying in tight V formation, nearly collided when the lead plane's engine failed and the other planes had to quickly change direction to avoid a mid-air collision. But I and my crew mate didn't know about it until we had landed. But a much bigger event happen after we had been transferred to the Naval Air Base in Ft Lauderdale. The pilots of five torpedo bombers undergoing a routine three to four hour flight called scout training became disoriented over what is known as the Bermuda Triangle. They all went down at sea and were never found. I assumed that my parents, who had only recently visited me and had returned home, would be better off not knowing about this tragedy. So, I didn't inform them, thinking this would be only be local news. But, of course, this made national news . . . and is still mentioned as part of the mystery associated with the Bermuda Triangle.

By the time our squadron finished our training program I hoped to be assigned one of the carriers soon to be commissioned. Instead, we were disbanded. I was shipped out to North Island in San Diego for a brief stay before moving to Terminal Island in San Pedro (Los Angeles harbor) for about six months, and finally to the Naval Air Test Station in Inyokern in the Mojave Desert for the last four months of my enlistment.

Fast forward again. With the war over and having been discharged in Los Angeles a buddy and I decided to hitchhike home thereby saving our transportation money. In uniform and with our duffle bags at our side, we quickly caught a ride as far as Las Vegas, then we were stranded in the middle of the night alongside I-15 heading north. Around four in the morning a couple picked us up in a modest two-door car. They too had left Los Angeles and were team-driving straight through to Grand Junction, Colorado. I remember the woman saying that she felt sorry for us standing there in the middle of the night. Once on the road the two of us tried to sleep while the man and woman in the front seat talked, I think to help stay awake. By her talk and the way she drove, I felt she was inexperienced. But that didn't keep her from driving fast. Consequently, I thought about the possibility of an accident and, should that occur, how I would switch off the engine if it were running so as to keep the car from catching fire from spilled gasoline. Sure enough as day broke just south of St George, I became wide awake as the car dropped off the right siding of the road. Approaching a culvert she over-corrected and we shot us across the road. Trying to get back onto the pavement caused us the car to roll as she let out a plaintive Oh! The scrape of the fenders against the pavement is a sound that haunted me for vears.

Both my companion and I remained in the back seat and were conscious throughout the crash. My feet which were hooked under the front seat as I stretched out to sleep plus the

momentum of the roll kept me in place as we rolled ending right-side up. As I had imagined, I did crawl into the driver's area and switched off the engine. I hadn't smelled gasoline, but I didn't want the car catching fire. Both the driver and her male companion had been thrown out of the car. She lay unconscious on the ground some 30 feet away, her dress bunched up around her waist. Her companion cried out, "For God's sake someone cover her up." He then crawled on hands and knees over to her. By that time several cars had stopped and the occupants began milling around the wreckage. I recall remaining calm after the crash. Calm? Oh yes, since I just stood and watched as others attended to the two lying on the ground. My buddy doing the same. Eventually, the woman was taken for dead and covered with a blanket. As we waited for an ambulance to arrive, I felt something moist on my shin. I pulled up my pant leg and saw an inch-wide ribbon of blood flowing down my shinbone. Somewhat later, an itch on my thigh revealed a shallow six-inches long cut. Until that time, I felt I had come through the accident unscathed.

As we milled around the wreck waiting for an ambulance to arrive, a passerby offered my buddy and me a ride as far as Denver. We declined the offer but a ride into St George. There, in an second story office, a local doctor sewed up my wounds. Imitating some movie I had seen I gripped the brass rods of a clinic bed as he cleaned out the cuts and made about twelve stitches. Wasn't so bad. But I can still recall the double stitch he took, going in one way then back again and tying a knot on the side. Shortly thereafter while walking around town waiting for the Greyhound bus heading east, both of my ankles tightened up. And by the time we boarded for home, my buddy for Ohio and I for Iowa, both ankles had stiffened to the point I could scarcely walk. So as to prepare my parents in Grinnell, I wired home saying that I would soon be home, "slightly lame." Being the optimist he was, my dad interpreted the cable as reading "returning home slightly late." Despite the trauma, my buddy and I thanked our lucky stars that we had survived; I got religion having been baptized in boot camp); and pledged to God that I would dedicate myself to helping others. Because of my romance with things foreign, I imagined it would be working for the poor in Latin America.

Two months later, I began my freshman year at Iowa State College. Without much discussion, if any, my mother had enrolled me there, which was fine with me. Both she and her older brother, George, had graduated from there. On my own, I had preferred civil engineering because I liked the idea of a profession that combined engineering and outdoor work. Towards the end of my freshman year, I recall sitting in the Student Union with a friend and saying that I owed something to society because life had been so good to me. Then, during my junior year two from our boarding house returned from Venezuela with photos and stories about their job with Creole Petroleum Corp, a subsidiary of Std Oil of NJ. Pictures showing the production fields, company housing, and camp life convinced me that this is where I wanted to work. I immediately wrote to Creole headquarters in New York City expressing my interest. Return mail said the company was not hiring at the moment, but they would keep my letter on file. In anticipation of eventually working in South America and the limited number of electives in the civil engineering curriculum I stayed in school another quarter. That allowed me to take Spanish and a few extra electives as well as play football another season. One evening after practice and having eaten at Friley Hall, the men's dorm, I happened to look across the street to a

two-story building with a single lighted window. I thought to myself that I wanted to find work that is so interesting that I end up working late into the night like that. Eventually, that wish came true once I joined Stanford Research Institute and Colorado State University.

As graduation time approached I again wrote to Creole, but with the same response. I also wrote some 200 letters to organizations, even the CIA, that might offer me international work without delay, but came up short. In the fall of 1950, the economy was recovering nicely so that opportunities from on-campus interviews were ample. I selected only those companies I felt could offer me overseas employment. I ended up with eight solid offers: one with Standard Oil of Indiana, which wanted to start me off at its refinery in Whiting, Indiana; one from Caterpillar Tractor, which promised me an oversees assignment, but only after three years training in sales; one with Firestone Tire in Akron, but as a plant engineer, but my visit there turned me off, as did my interview with the guy who went on and on about their retirement program (here I was looking forward to an exciting career and this guy was talking about retirement!); and one with Stanley Engineering in Muscatine. The latter came about as a result of Max Stanley, the founder, asked Prof Stewart, CE Dept Head, if there was anyone not on his list that he still needed to interview. And my name came up.

I drove my Model A to Muscatine for the interview with Lowell Titus accompanying me. Lowell and I met for the first time in freshman football, where I at 160 pounds attempted to play guard as I had in highschool. Lowell weighed nearly 200 pounds. I had been able to handled those of that weight in highschool because they were either fat, slow, or both. But not now. Once during tackling practice Lowell caught me on his shoulder, lifted me up, and slammed me to the ground. My back was sore for a week. The following season I switched to halfback, a position I had never played before, and made the varsity squad. Lowell and I remained friends from that point on. We both had lived in Des Moines at the same time, entered kindergarten a half semester apart, and were now beginning Civil Engineering classes concurrently. We even went skiing at Winter Park with the same group. Stanley offered to hire both of us. I declined because I didn't want to start off working in Iowa, while Lowell accepted the offer. He eventually became Vice President of Stanley International working and traveling overseas as much as did I. And we both graduated as Civil Engineers in December, 1950.

Eventually, I accepted employment with Robert H. Ray an oil exploration firm headquartered in Houston because they promised me an assignment in Latin America once I had learned the ropes while working in the States. My first assignment was as a rod man in a three-man crew that measured surface elevations via a bucket-like instrument that measured the pull of gravity. My first assignment was in Ft Morgan, Colorado in the dead of winter working fifty hours a week. With little else to do I spent many of my leisure hours during the cold winter months reading an earlier edition of The Epic of Latin America by John A. Crow (1952, Doubleday & Co., NY).

Then to King City, below Salinas on Hwy 101, where I manned the instrument instead of being a rod man. Though a small town of 2,500 it was a lively place, with fine men's and

women's softball teams. The women's team as I recall was one of the best in Northern California. In no time at all I became one of two rotating pitchers on one of the better teams. As a pitcher with the fans shouting my name it wasn't long before I was recognized by many in town. Walking the streets in the small downtown, young boys would call out to me, "Hi, Bill." The principal of the highschool, the chief of police, the postmaster, the waitresses, and so on knew who I was. Soon I was dating the first baseman on the women's team, who was also the lifeguard at the town's swimming pool, a bit of a tomboy, and well-liked. The town, made up largely of Swiss-Italian immigrants and Spanish-Mexicans, was agriculturally based. My work took me into the rugged coastal range accessed by narrow dirt roads and frequented by flocks of deer. When deer season arrived the hunters flocked to the hills. I even joined them, although it was not in my nature to hunt. But the deer suddenly became hard to find and I never fired a shot. Some five miles from town on one of the back roads was a rustic bar frequented by the locals. At the bar behind the bartender was a sign that read IITYWYBMAD?, which translated to If I Tell You Will You Buy Me a Drink? One time word circulated around town that there was to be barn dance that weekend some ten miles from town. A good share of the town showed up. As a young bachelor, I could not have had a more enjoyable time. Then, by mid-summer headquarters in Houston informed me that I was being transferred to Saudi Arabia. Latin America as I had been promised was out. So, I quit. Joe Leyous, the local farmer who managed our softball team and owned the filling station where we gassed up our vehicles said he would put me to work on the night shift at the station so I could remain in town till the end of the softball season. When that time arrived I went to San Francisco in search of work in Latin America.

I narrowly missed a position of assistant to the chief engineer for a project to build a railroad for a bauxite operation in Jamaica. I welcomed this opportunity, but delays in the mail between my address in Iowa and my local address in California fouled the deal. Aside from this possibility, my effort to find overseas employment south of the border was thwarted by my lack of overseas experience. How does someone just out of college go about gaining such experience if none are willing to give one the opportunity to work there? However, it wasn't long before I overcame this problem.

Because nothing of interest turned up, I accepted what I considered a temporary position with the engineering-construction firm of Brown-Pacific-Macon. Our large bullpen of an office, replete with drawing boards, was at the foot of Market Street where we could watch the ferries dock and ships pass under the Oakland-Bay bridge. I began as a *detailer*³ of the reinforced concrete structures the company was building on Guam. This wasn't overseas work, but the connection to the South Pacific was there. Within a few months I became the checker of other detailers' work. H.D. Peoples, a middle-aged engineer who was head of this branch office, said I could expect a raise in my next pay check. Great, I thought. I could use the money. The raise amounted to five cents an hour! For a forty hour week, that's two dollars But then Peoples

³ A *detailer* is one who converts engineering specifications to a list of materials and a set of installation drawings to be used in construction. It's a step above drafting that requires construction experience—something I gained in Grinnell during my summers of employment.

once told me that money shouldn't matter to someone young like me. If I got more money, I'd just spend it. Better, he said, to get lots of diverse experience. Do that by taking a variety of jobs so that I would be constantly exploring new areas of work. Occasionally Peoples and I attended Masonic Lodge meetings together; once, he even invited me to his home for dinner with him and his wife.

Bill Gamalero, a Guatemalan with an Italian father and Guatemalan mother, supervised our section of about 20 detailers. Bill was an excellent yet light-hearted structural engineer who was fond of telling self-deprecating stories about himself. One of his favorites was about the time he was taking his girlfriend out to lunch when he became involved in a fender bender at an intersection in downtown Guatemala City. He told his girlfriend to stay in the car while he appraised the damage and haggled with the driver of the other car. To his chagrin the driver of the other car was his wife. And here he was with his girlfriend sitting in the front seat of his car. Knowing Bill it was hard to tell if the story was true or not. But then this was Latin America and Bill could have been the reputed Latino male with a girlfriend on the side. The incident hadn't ruined their marriage, however, because his wife, Choli, was still with him.

I took a strong liking to Bill, not just because he was a Latino, but because he was simply a nice, light-hearted guy. Our friendship eventually led him to introduce me to Lucy Arrivillaga, a pretty young lady who was also Guatemalan. She had a trim figure, narrow hipped but spindly legs, black hair, and clear, white skin suggesting her parents were of Spanish descent. No great romance here, because I had my sights set on working in Latin America and wanted to remain unattached. Strange that I paid so little attention to her figure mainly because she dressed to kill, wearing blouses up to her neck often covered with a bulky sweater or a Bolero jacket. I figured she must have had money beyond her salary as a key-punch operator. It wasn't till we went to an oasis-type picnic area near Stanford with a crowded swimming pool in a setting surrounded by tall eucalyptus, with expanses of green grass and shrubbery that I saw her in a swimming suit. And she was *stacked*! We didn't try conversing in Spanish, although I had begun taking night classes in Spanish at San Francisco State University. I don't think I had that much command of the language at that time. Still, her descriptions of Guatemala's beauty, including how Lake Tahoe reminded her of Guatemala's deep blue mountain lake of Aticlán. This lake, which Vicky and I eventually were to visit is surrounded by pine-studded mountains with small Indian villages along its shore named after the apostles.

During these months in San Francisco, about nine in all, I enrolled in night school at the University of San Francisco to study Intermediate Spanish. Now, with summer approaching, our instructor, a native of Spain, told us about his plans to off a summer course at the Teachers' College in Zacatecas, Mexico. During this time as I pursued job opportunities in Latin America, my friends would sometimes ask, "What are you running away from?" I answered, "I am *not* running away from anything! It's just that I want to do something useful with my life and do that overseas. "Why can't you find something to do usefully to do in the States?" My answer? "It's just that the idea of working overseas excites me. And I want to go there while I'm still young and burden free.

So, the summer of 1952 found me driving the Ford Coupe that I had bought earlier in San Francisco, through El Paso, Ciudad Juarez, Chihuahua, and Durango. Julio Castañeda, a Cuban acquaintance of our instructor, accompanied me. As we set out, he suggested that we confine our discussion to Spanish so as better to prepare me for our time in Mexico. Foolishly, I declined. I eventually figured out why he must be going there. It was not to learn Spanish, since that was his mother tongue. I think this bachelor. who was pushing 40, was hoping to make some lady friends. Our trip down the good asphalt highway in Mexico traversed high plateaus bordered by rugged, barren mountains. We overnighted at a modest hotel in Chihuahua where a boy of perhaps 12 offered to watch our car. Julio told him it wasn't necessary. Nevertheless, the next morning we found him by the side of our car saying he had guarded our car all night. So, when we paid him some small amount, he pulled our two windshield wipers from his back pocket and reattached them to our car. First lesson, it pays to go with the system.

On the fifth day of our trip we arrived in the picturesque mining town of Zacatecas, where we were to spend the next six weeks studying Spanish. We spent the mornings in traditional language classes and in the afternoons one of the resident teachers taught us local songs and dances. About a week after arriving, a severe case of diarrhea accompanied by high fever and the resulting aches and pains put me in bed for three days. No one had warned me to watch what I drank, or to stay clear of salads and uncooked vegetables.

After my recovery, the parents of two of our female teachers invited a few of us for lunch at the family's apartment facing the city square. The father, a large, ruggedly handsome farmer who lived in town by the main plaza had a full cup of chili jalapeñas by his plate and proceeded to finish a good portion of it during the meal. Along with the meal came Pepsi-Cola. And here is where I learned a second lesson. Growing up I was taught to finish what was on my plate and in my glass. Observing that mine was empty, the father asked if I wanted more Pepsi. "No thanks, I've had enough," I responded. "Then you didn't like it," he said. "Oh, yes I did," was my response. "Then have some more." This routine continued until I must have finished off several bottles. The problem was that I continued to drain my glass each time he filled it up, signifying to him that I wanted more. The lesson: always leave something on the plate and in the glass. I suspect he wondered at this young American who was so fond of Pepsi-Cola.

I and our group from the States had a lot to learn during the early days of our stay. For instance, once, while walking through the streets with a few young men strumming their guitars, Delores of our group was about to apologize for her poor Spanish. She began by saying *Estoy embarasada* but she didn't finish before they burst out laughing. In this case, the cognate doesn't work. To be *embarrassed* in Spanish means *I am pregnant!* Or, for my part I wanted to take a photo of an old man in rags sitting on the curb, but the Mexicans persuaded me not to do so. They apparently thought it in poor taste to photograph someone like this. Or, at a local dance where some of our group attended I didn't understand why things got so rowdy. I saw nothing alcoholic being served. What I didn't know was that the Cola being served was actually *cuba libre!* Before long some of the local men became aggressive towards the Filipinos who were part of our Spanish group. I never found out why.

During our stay, Julio fit in nicely with the locals one of whom invited the two of us to a *country club* several miles from town. Once we arrived I realized that this was not a club as we know it in the States, but a pleasantly landscaped area with a small restaurant and bar. Later, when the waiter brought us the bill for the drinks, I offered to pay the bill, or at least part of it. To my great surprise, my offer nearly resulted in a fight with our host. Later, Julio informed me that I had *greatly insulted* his friend by refusing his hospitality. Since then I have learned to accept gifts gracefully.

Still another lesson occurred on the day our group left Zacatecas. Most of us were destined for Mexico City where we would sightsee for a few days before departing for home. About mid-way through our stay in Zacatecas, I had struck up a pleasant relationship with Teresa Contreras, one of the teachers. She was about my age, nicely rounded but not fat, modest and sweet with just a touch of mestizo blood, perhaps 5' 2" and 115 lbs. We communicated as best we could, given that I was only beginning to know enough Spanish to carry on a conversation; she knowing no English at all. Even so, we got to know each other though un-chaperoned mid-day visits in the park just up the street from our hotel. We occasionally held hands. Thinking that we would have one last chance to see each other before departing for Mexico City, we agreed to meet arriba. I thought she meant up in the park which was our usual meeting place; she meant up in the sitting lounge on the second floor of our hotel. I waited in the park for over half an hour before returning to the hotel. When we finally met there she was distant and reserved. was where I learned to say *créame* (believe me). But it didn't work. She never did believe me when I tried to explain what happened. Not even during our occasional encounters in Mexico City where she had accompanied some of the female members of our class. The lesson? shows how delicate the foundation of confidence can be among neophytes at cross-cultural relations when language can be a barrier.

The trip to Mexico City was culmination of our Mexican experience where there was so much to see. Nearly all of our class, including our instructor and his family made the trip. Even though I was running low on cash I decide to risk it by making the trip. I had money in a checking account back home, but figured it would be difficult to cash a check outside the States. By the time I departed for home I had just enough money to pay for gas and a little food, provided I slept in the car at night. But before I reached the border I had two flat tires that needed repair; and ended up subsisting on bananas and tortillas before reaching Dallas. Once there two friends from Grinnell could vouch for my check. Even though I felt starved the thought of eating the few bananas and tortillas I had left turned my stomach. With only the two dollars I had left I entered a small diner and ordered a single egg, toast, and coffee. That simple fare remains in my memory as one of the most delicious meals of my life.

Back in Grinnell, I was anxious to tell my friends about my Mexican experience. To my disappointment no one seemed interested. In fact, some hadn't realized I had been gone the past two years. Continuing my search for work in Latin America I wrote to Creole and others describing my summer in Zacatecas. Still to no effect. Meanwhile I hired on as a common laborer on a construction gang without saying anything about my Civil Engineering degree. Willis Rayl, who had graduated from ISC about the same time as I, worked along side me. A

romantic, he dreamed of working his way across the Atlantic on a freighter and living a simple life in Europe doing odd jobs that would allow him to write and pursue his musical interests. After a couple of months excavating soil for foundations, shoveling pea gravel, and hauling concrete, we decided to head for New York City--he for a work on a ship to Europe and I for work in Venezuela. We rode in the Ford Coupe that I had bought in San Francisco. Along the way during our stops to eat he kept feeding quarters into the jukeboxes, listening to Sarah Vaughn when we could, even though he was nearly out of money. As I entered the YMCA on 34th St Rayl asked me to loan him twenty dollars since he was out of money.

The next day I visited the Creole office where I was told that my correspondence with them was on-file. Before making me an offer, the personnel officer said that the company was not interested in hiring anyone for just two years: they were looking for long-term employees. I readily agreed, although I wasn't sure I wanted to spend my whole career there. As it turned out I didn't, but as an option, it wouldn't have been bad. Those who stayed with Creole long-term ended up wealthy; and life there, as I'll relate in the next chapter, was good. Earlier that day I had visited Gulf Oil, headquarters for Mene Grande of Venezuela, and received a job offer from them as well. Going to Zacatecas had been a good idea.

Rayl was also successful, but in a far different way. After we parted he worked in a hospital until he was able to gain a position on a ship destined for Europe where he worked for awhile. He met up with a Norwegian who was looking for someone to sail down the coast and into the Mediterranean. After that he bummed around Europe some more, marrying an accomplished opera singer whom he eventually divorced. Rayl was handsome, a talented saxophonist, well-read (he introduced me to Dostoevsky), and always a dreamer. The girls loved him.

Chapter 2: Getting to Venezuela

Within a month I had taken a physical, received the necessary inoculations, and bought a small wardrobe of tropical clothes. My trips to Mexico and New York City, together with my meager construction earnings, left me short of cash. Rather than rely on my parents, although they would gladly have bankrolled me, I took out a short-term loan at the local bank. In November, 1952 I flew to Miami, where the scheduled over-night delay gave me a chance to retrace some of the places I recalled from my Navy days here: Flagler Street, my favorite restaurant near Biscayne Bay with its royal palms, north to 19th St. which was the site of our Navy barracks converted from a partly finished luxury hotel. We refueled in Kingston, Jamaica, and Aruba, and finally into Maracaibo late at night. When I landed there, I had a footlocker with my meager possessions and a \$600 debt with the bank. As the plane taxied to the terminal, I noticed tanks bordering the runways and army troops strategically stationed at the terminal. "So, this is what Latin America will be like," I thought to myself. Customs officials were thorough, but not demanding, and I got through without difficulty. A Creole employee holding a sign with my name on it greeted me as I walked into the main lobby of the one-story airport terminal. We drove through softly lit residential areas until we reached a small two-story hotel. The night was calm, the air was warm, trees were in full bloom, and the sent of frangi pangi filled the air. This was what I had imagined, what I had been looking for. I was thrilled.

Maracaibo, Venezuela's second largest city with perhaps 200,000, borders the western side of Lake Maracaibo in western Venezuela. (By comparison Caracas, the capital, had a population of a million; the country, a total of six

million.) Located just 10° north of the equator, the area was hot and humid; but temperatures, moderated by winds off the Caribbean seldom exceeded 95°. The lake was commonly described as being 90 miles north to south, 90 kilometers east to west and 90 feet deep. Its waters were mildly brackish due to limited intrusion of sea water over a 20' bar freshened seasonally from streams entering the lake to the south.

The next morning another driver arrived to take me to Creole's Western Regional Headquarters some two miles away. Traffic was fairly heavy. Along the way, venders strolled in and out of traffic selling magazines, combs, and coffee. The latter, they offered in thermos bottles with a small spout, much like that used in pouring shots from a liquor bottle. Eventually, when I tried the coffee, which the vendors poured into a small paper cup, I found it hot, sweet, and stronger than the heaviest espresso. At the several stop signs, impatient drivers with arms hanging outside their window would bang on the side of the door since the government had outlawed the use of horns. Rules such as the first to arrive, or if simultaneously, the one to the right had right of way, did not apply. Whoever was the most aggressive got through first. Otherwise, you'd remain at the intersection with traffic lined up behind you accompanied by the din of banged car doors in your ears. Later, while driving our own car, I learned to turn my head as though I were unaware of competing drivers. But of course I strained my peripheral vision so that I could stop in case my bluff was not working.

Years later while living in Maracaibo, we observed a full intersection stalemate: four drivers each attempting to make a lefthand turn completely blocked the path of the car in front. Cars backed behind each car whose drivers were unwilling to give in blocked traffic for what seemed like an hour. Oh yes, the *Marachucas* could be stubborn, partly because they thought it beneath their dignity to give in. So, they just sat in their cars banging the side of their cars. Eventually a traffic officer cleared up the mess and got traffic moving again, while assuaging

the drivers' dignity. On another occasion, a male driver was ogling a young girl in tights who was walking along the sidewalk. A woman driver watching him instead of where she was going and rear-ended him. His lame excuse was that it was not his fault. "She was the one with the tight pants. What could I do?"

The headquarters were situated in a pleasant residential area that comprised a relatively large office complex, social club with swimming pool and tennis courts, some staff housing, and large lawn studded with coconut palms and flowering bushes. I was ushered into the office of Jim Barclay, Chief Engineer of the region. He was a large man, perhaps 6'-1" and 210 pounds, who looked much like Daddy Warbucks in the Little Orphan Anne cartoon strip. He flashed me an Eisenhower smile and asked me to take a seat. He welcomed me to Creole and Venezuela (many of Creole employees were long-termers, expected to end their careers here). I later found that Jim's friendly nature did not extend to the golf course, where as a lousy golfer with the same disposition, he could find all sorts of reasons why his game was not going right. But that didn't keep him from playing a couple of times a week. For some time now, the Western Division had been Creole's major oil producing area, with all of the production coming from Lake Maracaibo where the wells were atop platforms supported by reinforced-concrete piles or caissons. Several others in the office gathered around as the Chief wanted to know about my experiences at the airport. Without my knowing, I had landed shortly after a successful coup. The new president, Peres-Jimenez (P.J. for short), had gained power during the day by means of a bloodless coup, the aftermath of an national election that was not going his way. I could only say that I thought what I saw was simply the way things were in Venezuela. The overthrow apparently did not seem all that threatening to everyday Venezuelans. The deposed was considered the zero in what was called 101, i.e., he was a nothing in the middle propped up by a general on each side.

A Creole driver arrived for me early the second morning here. Early meant 6:30, since working hours in the camps were 6:30 to 11:30, lunch and siesta, then 1:00 to 4:00. Those who worked on the lake or in the Industrial Area worked straight through to 2:30 and grabbed lunch as best they could. This arrangement caused the Venezuelan laborers and craftsmen no problem, since their custom was to take the time they needed to eat while on-the-job. We rode through the city and down the hill to the dock, where we waited in a long line to board one of the ferries that crossed the lake throughout the day and early evening. Lines of cars and trucks were typically long. It was not uncommon to see *dignitaries* crash the line by forming a separate line close to the loading point. I soon learned of the Latin's disdain for orderly waiting one's turn, quite the opposite of the English penchant for *proper* conduct. Now, a bridge spans the mouth of the lake.

Once across the lake we followed the bumpy asphalt road weaving around melted soft spots and the washboard left by a soft road base and overweight trucks. Mangy dogs with their skins stretched tightly across their ribs wander alongside the road, cowering when someone approaches, almost oblivious to the threat of being run over. Life cannot be worth much if constantly hungry. Some do not make it. Their carcasses being stripped clean by some of the largest vultures I've ever seen. The locals refer to these birds as natural garbage collectors. To the west of us, between the road and lake, we pass occasional simple, palm-studded picnic areas. The odor of methane drifts through the air. Off in the distance, gas is being flared from wells and the lake reflects the sheen of oil from the nearby wells sitting on shallow platforms in the lake. Eventually we pass through the village of Cabimas: a scrubby little town with muddy roads, few shops of interest to expatriates, a few wooden municipal buildings, and a square-block grassless plaza bordered by a squat catholic church.

Slowly, we proceed on to the nearby oil camp of La Salina where I am to be stationed. Tia Juana, another Creole camp, lies 20 miles beyond and Lagunillas, a third Creole camp, is another 20 miles south. Beyond that is the Bachaquero camp with only a token staff, made up primarily of production engineers and drillers. These four locations make up the heart of Creole's highly productive western division. Also operating in this region is Mene Grande, the Gulf subsidiary, and Shell (Royal Dutch Shell with headquarters in the Hague and in cooperation with the British). I didn't know it at the time, but I soon learned that Creole's operations in Venezuela along with the pay scale, opportunities for advancement, and general amenities were far superior to these other two companies. In fact, consultants from Northwestern Business School who visited the area, likened Creole to the Air Force during WW-II, where fliers often became lieutenant coronals at an early age. If a Creole staff member wasn't progressing up the salary and position ladder by age 35, he was considered a failure. Truly, these oil-field expatriates were an interesting group: venturesome men and the female teachers who taught in the camp schools. I was happy to be among them.

The superintendent in each of these three camps held a powerful position. He had command over an annual budget of millions of dollars, perhaps 300 expatriate staff, and many times that number of Venezuelan professionals, craftsmen, and laborers. He was practically the *mayor* of the expatriate community and strongly influential over those Venezuelans employed by Creole. The Superintendent of La Salina was Hugh de N Wynn. The locals called him *Don Lava Sol* after the local detergent, because he made such a fuss over keeping the camp and industrial area so clean. Part of Wynn's interest in a clean camp was associated with his desire to keep lost-time due to injuries to a minimum. Later, we learned that he was a Yale or Princeton graduate, had important Washington contacts, and carried himself like Franklin D.

Because this was the oil industry, the majority of Creole *expats* came from Texas and Oklahoma. They came here to ply their trade and earn as much as they could, while also living a comfortable life. Lacking my romanticism about Latin American culture, language, and history, they paid little heed to the Spanish language. They got along, but often butchered it in the process, with their limited vocabulary and American accents. Nevertheless, they frequently substituted Spanish for English. Even now I refer to a sudden storm as a *chusbasco*, a small dry ditch as a *quebrada*, good deal as a *pan grande*, *oiga* for listen(!). These we carry over because they feel comfortable. Then there's the *pst pst* to get a waiter's attention. I can stop Vicky on a dime from fifty feet away when I do this to her. She feigns annoyance, which I don't take seriously. Interestingly I can do this in a crowd and Vicky seems to be the only one who hears it.

For their part, the Venezuelans had their own version of the Spanish language. For instance, they used *pescao* instead of *pescado* for fish once caught; *pa'lante* instead of *para adelante* for up ahead; *dale clavo* means literally strike the nail, or get going; *ojo pelao* instead *quedate tus ojos pelados* for keep your eyes pealed; *pa ya* instead of *para allá* for over there. Or, without a sound. pursing the lips and moving them forward, left, or right to show someone where to look. Years later, when standing on a street corner in Sevilla, we overheard the same sort of shortened words. We thought the speakers to be Venezuelans. To our surprise, we were later told that the original Venezuelan settlers had come from this part of Spain and simply had maintained the manner of speech of their homeland.

The majority of those who were successful and stayed for any length of time eventually become millionaires several times over. Such wealth was not confined to professionals, such as managers, engineers, and accountants. Joe Heitman, head of "Reclamation" (otherwise known as the junk yard), had arrived in Venezuela during the 1930s, had invested in Creole stock, and had accumulated so many

shares that the Board of Directors in New York City would call him before proposing major changes in operations. Sounds exaggerated, maybe it is. But that was the story circulating through the camp. But such assumed wealth had little effect on him. I remember being in his littered office with Joe dressed in grease-stained overalls banging away on a small steel boiler with a large sledge hammer. Another long-term employee was Ed Foley, head of camp maintenance. His daughter, Betty, had lived all her formative life in the Creole camps and, after her marriage to Phil Lybrook, she remained in Venezuela. Her body had become so accustomed to Venezuelan conditions that each time she returned to the States on home leave, she experienced the same sort of dysentery as the rest of us do when first going abroad.

For my part, I progressed from Engineer-in-Training to Senior Engineer within four years; and from being in debt upon arrival in Venezuela to having saved \$30,000. By the time I left, I had saved enough to finance two years of graduate school at Harvard, the birth of Tim, our second child, to put one-third down on a three bedroom house in Los Altos, California, and still have money left over.

Even new arrivals felt flush with their ample salaries combined with company accommodations provided at little or no cost, the short weekends, and few opportunities to spend, except during annual leaves. As a result, the bachelors especially often looked for ways to invest their surplus funds motivated by the desire to eventually return to the States in time to take early retirement, start up some new business, or otherwise take advantage of their wealth. One source of income growth was investment in the stock market.

Risque Benedict, a particularly naive new arrival, was assigned to the Corrosion Control Unit. This small unit, headed by Frank Chuck, was located in

the industrial area and staffed by six who followed the stock market closely. One day, Risque heard them talking about how some stock had gone up two points, which meant they had earned \$500 for the day. "Wow," thought Risque. "How do I get in on this?" His associates told him about contacting a broker and setting up an account. "But," said Risque, "I don't have that kind of money yet." "No problem," was the response. "You can buy on the margin." They went on to tell how that was a method whereby the broker arranged for the investor to borrow money so as to increase the size of his investment. So, time passes and Risque sets up an account and proceeds to leverage his investment with borrowed funds. Then, reality sets in. Risque came back to the group with the question, "What happens if the market goes down and I'm forced to cover the loss. You know, I am still rather short on funds." "No problem," his friends said. "You set up a stop loss." "What's that?" "You decide how much of a loss you are willing to take before you sell. If the stock goes down to that level, your broker sells your stock and you limit your loss to that amount." "Fine," said Risque and he proceeded to follow this suggestion. Now, because money was still dear to Risque, he set the stop loss rather close to the current market level. And, sure enough, in a few days, the market in its gyrations dropped and ticked off Risque's stop loss and his broker sold his stock. So, within a couple of weeks, Risque was a thousand dollars poorer, but definitely smarter. How did I learn about Risque's fiasco? La Salina was a small community and stories like this got spread around.

The size of Creole's operations was revealed one morning when, chortling to himself, George Seeley (chief of operations) stuck his head in the doorway of the office of Dave Pugh (Creole's surveyor) and said, "I just placed an order for two million dollars worth of pipe!" In another instance, Frank Chuck made a pitch to management as to how he could save the company a million dollars within a year through erosion control by wrapping the thousands of miles of pipe lying (and corroding) on the lake's bottom. Management wasn't interest because, "we can

earn that much in a single day. Just tell us how to get oil out of the ground more quickly." Undeterred, Frank told whomever would listen that he expected to one day be on Creole's board of directors.

Back to my morning in Venezuela, the driver dropped me off at the main office building, an extended two-story wooden farmed building. A burst of cold air from the central air conditioning unit that nearly knocked me over when I opened the door. Upstairs, I met the district's chief engineer, who said that I would be working as an understudy to Don Sheng, a mild-mannered civil engineer. Don and his wife had been residents of La Salina for perhaps five years. Unlike some of the others, Don was not a mover and shaker. Having settled into the routine activities of everyday engineering and camp life, he turned his attention to accumulating as much money as he could thereby shortening the time until he could retire with a sizable nest egg. That focus led him to service the soft drink dispensers that dotted Creole and other camps up and down the lake. I don't recall any of the work Don assigned me. But I do recall accompanying him on one of his trips to collect money from those managing the dispensers. When he checked in at one of the worker's homes in this regard, the wife said her husband was gone for the afternoon, referring to him as a pájaro bravo. Literally, a brave bird, but I think she was referring to him as puffed up, aggressive, and leaving in a huff.

Don and his wife had nicely assimilated into the local community, which was not difficult, since Venezuelan professionals and the expatriates (mostly those from the USA) lived together within the camp. Don's Spanish had become good, as were his mannerisms, one of which was to raise one of his hands up in front of his shoulder facing outward whenever he meant to show denial or lack of responsibility. (A favorite saying accompanying such a physical expression, was *la culpa no es via*, i.e., it is not my fault.) Years later, when President Pérez Jimenez fled to Miami, a photo in the local newspaper showed such positioning of

both hands with the translated caption, "All I want to do now is live in peace and quiet." Why wouldn't he? He had probably absconded millions of dollars. Back to Don. He and his wife introduced me to Beatriz Armas, a delicate, dark-eyed young lady with a rosebud mouth. She was staying with her brother, Dr. Armas, a local physician, his wife, Esmeralda, and the mother-in-law. While Beatriz was pretty, I eventually saw her in a bathing suit (chaperoned, of course), and found her scrawny. Aside from this one instance, my exposures to Beatriz were at the camp movies and at her home playing bingo with the family, using toothpaste tube caps as markers. Only the doctor spoke English. So, these evenings gave me good opportunity to improve my Spanish. Throughout, I played it cautiously because of the stories I had hear about commitments, honor, and the like concerning young women's dealings with *Gringo* men. Not to mention the wrath of young Venezuelan men defending the honor of the lady folk.

This arrangement caused some stir among the expatriate bachelors in camp: not that I was dating Beatrix, but that I was in the company of her sister-in-law, Esmeralda. Esmeralda exuded sex. Sloe-eyed, nicely filled out, and with a sweet, suggestive smile. When thrice weekly the Dr. Armas and family (wife, Esmeralda, Beatrix, sister, and mother-in-law) would attend the movies shown at the Club, Esmeralda would saunter down the isle hips subtly swaying past gaping men, young and old. Rather than being annoyed Dr. Armas seemed proud and self-assured. After all, he was not only a medical doctor, but a military officer.

The Club was a popular spot: with families, bachelors, and school teachers. The teachers would sign on for two years, but more often than not extended their stay. They taught Creole staff's children from kindergarten through the eighth grade. Beyond that, the children of American staff would usually continue their schooling in the States, often attending private schools. The Club was a simple structure open on three sides to catch the breezes off the lake, with a bar and

short-order restaurant, a dance floor where folding chairs were placed for the aforementioned films that were shown, and a good-sized swimming pool (perhaps 100' x 30') with one and three meter boards surrounded by grass. Many of the "old timers", especially those who finished work at 2:30 would head there for drinks while they played dominoes. *Zulia* and *Meta*, the local beers were good, especially when accompanied by the savory *tequeños*: goat cheese wrapped in pastry dough and deep fried.

After my short discussions at the office, one of the engineers drove me to my quarters. These were one of perhaps twenty such buildings, all alike with four spacious bedrooms, a central sitting room, and a small kitchenette with a sink, small cooking stove, and refrigerator. The stove got little use from the bachelors, since the company mess hall was just around the corner. At times, they would eat and drink at the Club. My three room mates, Paul, Dave, and Claude, were civil engineers who had arrived in La Salina shortly before I did. They were "rounders." One of their "brighter" ideas was to purchase a case of whisky because it was cheaper than buying bottles one at a time. This occurred on a Saturday afternoon and by Sunday evening the case was gone. A fight or two broke out among them and the sitting room was a mess with empty whisky bottles, splotches on the waxed concrete floor from spilled drinks, and a few broken glasses; but no busted furniture. While I drank to some extent, even had the bed slowly rotate on me when first lying down, I was not in their league. When not drinking, we got along just fine. We heard that Paul eventually died of alcholism. Dave soon transferred to Creole's Technical Engineering Group in Maracaibo where he became an understudy to Creole's premier structural engineer. He married an extroverted Venezuelan divorcee, sobered up, and became a successful structural engineer. Claude married an attractive, level-headed school teacher who made him tow the line.

When lunch time arrived, I wandered over to the mess hall some 200 yards away where I met Ed Dooley. He was seated at his customary spot surrounded by a small group of other bachelors and female teachers who listened more than they talked. I listened too. Ed was stocky, fair-skinned (later to suffer considerably from skin cancer), well built, a competent engineer from Georgia Tech with its quality engineering program, a prideful Southerner with a inborn dislike for nonwhites, well-read, opinionated, and still bitter since his arrival in Venezuela. The latter resulted because his wife of a few years who had left him for another man. As a result, he could often be seen in the evenings at the Club sitting by himself and nursing a beer. Before my stay in Venezuela was over, life had changed for Ed. He married Mary K, one of the expatriate school teachers who was venturesome, having left a small-town Iowa to teach in Japan, upbeat, and supportive. They had two marriages: one in Cabimas and the other back in the States. At that brief ceremony in Cabimas, all in Spanish, Mary K, without knowing it, had agreed to follow Ed on his burro while she walked behind. In a short time Mark K had succeeded in nursing Ed's damaged spirits back to health.

Mary K was a clown in some respects in that she loved to tell stories about herself and her family. She told us how when she was perhaps seven that she and her cousin of about the same age were visiting her grandmother. The latter loved to play jokes on the kids. So, one night when her cousin was to spend the night sleeping with her grandmother, the grandmother went to bed before the others, took out her false teeth, closed one eye but opened the other that stared vacantly into space, opened her mouth, and held her breath. The cousin came into the bedroom took one look at her grandmother's apparently lifeless body and ran out of the room yelling, "Jesus Christ, grandmother's dead!" Mary K also talked about staying up evenings while in college talking with some of her girl friends. They would relate to her all of the "moves" the guys would make on them and how they had to fend them off. Mary K said that she never had to fend off any of her boyfriends, that

they had never been fresh with her. In disbelief, the girls asked Mary K to describe how her boyfriends treated her. After telling them of her experiences, her friends screamed, "That's it, Mary K That's it! You just don't know a pass when it comes your way."

Mary K's story about how Ed proposed to her, ranks right up there with her other stories. It went something like this:

Ed and I had been going together for quite some time. Ed seemed attracted to me and I to him, especially for his wide-ranging knowledge about so many things. He was a voracious reader. One evening we were sitting in his pickup and I was about to go into my room when he looked at me and said, "Mary K you are not getting any younger and if you stay here for another five years you'll be thirty-five. By then no one will want to marry you and I won't be around here any more. So, why don't we get married?" Mary K said she was stunned by this backhanded proposal, coming "out of the blue" as it had. After thinking it over for awhile, she came to think Ed was right, so she accepted. How romantic!

Although Ed could have held down a technical or management job, which would keep him comfortably in the office, he preferred working in the industrial area or on the lake. When I first met him, he supervised the pipe-coating operation—a difficult, and even dangerous job in the industrial area. The danger came from the application of hot asphalt to the pipe moving through the machine. When the machinery malfunctioned, he would make the repairs himself often resulting in serious burns on his forearms and chest from the hot bitumen. Ed would rail against management for not providing better equipment, but still he stayed with the job. Nor would he ask others to do this dirty and dangerous work. He felt that those in management would reward his steady, hard work rather than chastise him for what he might say about them. Unfortunately for Ed, it didn't

work out that way. He particularly objected to the smooth-talking Frank Chuck. Frank exemplified the bright, ambitious young engineers who saw in Creole the opportunity to rise quickly within the organization while making lots of money. Both were important to him because he grew up in an exceptionally poor rural family in Iowa.

The following is typical of how Ed got himself in trouble. One evening in the mess hall, Sam Mathis, a new arrival in his mid-forties joined our group, sat down, and quietly listened to Ed rambling on about life in general and Creole in particular. Ed's thoughts about those above him in the main office were not complimentary. He was in rare form. Not long afterwards, we learned that Sam was to be the new Deputy Superintendent. If all went right the Deputy could expect to become the Superintendent who, in turn, would often move to a high-ranking position in Caracas. Ed was not embarrassed by the revelation, for he prided himself in saying what he thought. Even so, Ed's blunt speech could not have helped his career. Ed eventually left La Salina to pursue other work.

My work with Don Sheng was cut short when I learned I was to go to Caracas for an intensive, one-month course in Spanish. Although I had recently spent time studying the language in Mexico and San Francisco before that, I wanted to get better at it. Three of us made the trip to Caracas together. The other two were Hal Thomas, Seeley's record keeper, and Dave Tilson, an industrial engineer, who were also recent arrivals. Following their lead, we stopped over for a few days in the Dutch Antilles island of Curaçao. What I remember most were the red-tiled roofs, the official changing of the guard in front of some important building, the tourist shops, the clear water at the rocky beach we visited, and hearing young men and women yelling to each other in a mixture of English, Spanish, Dutch, and Papiamento, a creole language. What we heard was something like this, "Oye

(listen in Spanish)," (a couple of phrases in Dutch or Papiamento, then) "Hey, come on." Strange listening to such a mixture.

After we had been in Caracas for awhile, I received a call saying that McCammon, Creole's chief engineer, wanted to see me. Apparently, it was his custom to meet the company's engineers while they were attending the Spanish course. I thought this to be simply a courtesy call, but I walked out of the meeting feeling vulnerable. It was not that his questions to me were difficult to answer. They were only of a general nature. The uncomfortable feeling came from how little he said, while I talked "my head off," and how closely he focused his attention on me. This was a new experience for me, and one I have tried to avoid since then.

Finishing the course, we returned to La Salina. Once there I learned that I was to be the engineer on the largest of Creole's three floating pile drivers. Creole claimed this one to be the world's largest. It was a simple job. Under the command of the pile driver captain, Slim Linger, my principal function was to count and record the number of blows of the pile driver's hammer within a given distance to establish the point at which the pounding could stop. The job was what one made of it. With the pile driver captain's help, I found plenty to keep me busy. For example, the captain (I didn't call him Slim or Mr. Linger) wished to know how much of a upward lift he could exert using the pile driver's winch. To do this, the crew attached a cable around one of the pilings that supported one of the well platforms. The upward pull of the cable, depressed the barge. By measuring the amount the barge sunk into the water, it was possible to estimate the upward pull. Others didn't find the challenge. Tommy Gimmell, for example, wrote in his engineer's log, that he "Sat on my ass all day reading a novel." Tommy had more than his share of self-confidence, having been a successful Golden Glove light-middleweight boxer. He was not completely remiss in taking this job lightly. Creole's pile driver captains were seasoned professionals who certainly knew their

work better than we "wet nosed" engineers. And the crew's performed their jobs efficiently. The presence of an engineer, plus the records he kept, lent authority to the construction of the well platforms should their structural soundness ever be questioned. Although my knowledge of the Spanish language was sufficient for me to get along, my exposure to the Venezuelan crew that manned the barge brought me into contact with another segment of the language. Without exaggeration, perhaps a third of the words they spoke were unspeakable in polite company. I have since found that the use of foul words in a foreign language does not carry the same force as do similar words in one's native language.

After a few months, I was glad to be reassigned to the La Salina industrial area where I was responsible for designing a reinforced concrete entrance, replacing large sections of asphalt, and other activities. The area spread out over hundreds of acres adjacent to the lake. It contained a marine workshop that overhauled the launches that carried the production crews to their jobs on the lake. A dry dock facilitated the overhaul of tug boats and barges. Gantry cranes running on railroad tracks facilitated the pouring of concrete for the 24" x 24" piles and 6' diameter caissons. Also there were large warehouses, pile casting yard, welding and electrical shops, and the pipe-coating operation where Dooley worked. The area was a beehive of activity that supported the Western Division's huge oil producing activity.

Spending time in the industrial area gave me the opportunity to observe the Venezuelan laborers first hand and some of the cultural differences between them and us expatriates. For example, the local laborers and craftsmen sitting on their haunches with their elbows resting on their knees, hands skyward, and in a circle sharing a meal. Taking their turns, they would dip their fingers into one of a three tiered set of containers that each carried to work. They would lift their hand, tilt back their head, and let the contents from their dripping fingers fall into their

mouths. I never joined them, but the smells drifting our way were pleasant. What got under our skin as much as anything was their waiting around until the siren blew before sitting down to eat. Another cultural clash was the locals' unrealized wish that they get paid double while on vacation because they incurred more expenses during this period. That seemed strange then, but now I have read how some European workers receive bonus pay during vacations and at Christmas time for just this reason.

Through my discussions with Creole workers, even some professionals, I noted how often they talked about money implying how important it was to them. But, then, many of the expatriates were in La Salina for the very same reason. This side of the lake had been scantily populated before oil was discovered, so the Venezuelans who came here had money on their mind—a strong enough draw to make it worthwhile to leave their family and culture behind.

And I noted how frightened they became when they came down with a cold or the *gripe* (a severe, but not life-threatening combination of a cold and flu) or how they would cover their nose and mouth with a handkerchief whenever dust was in the air, or when sitting next to someone with the sniffles. I kept it to myself, but secretly ridiculed them for being so fearful. Since then, I've come to realize that without good access to medical care or having poor nutrition, they rightfully worried about their health and the possibility of sudden death. Creole did provide good medical care for all of its workers, but those who were concerned probably came from an area where it wasn't. And they brought their old habits, and fears, with them. Even though fearful, they could be lighthearted about their problems. After a visit from *Tongalele*, an out-of-country Tahitian-type dancer at a bawdy tent show, the locals began calling the *gripe*, the *Tongalele* because the got feverous while watching her.

Through such contacts I came to believe that life for them was generally a happy one, even though their living conditions were modest. They had a roof over their head, enough food to eat, and had acclimated themselves to the heat. It was only when they became sick or they were ambitious that life was not fulfilling.

The local workers had names for each other as well as for the expatriate staff: *el gato* (the cat) for a laborer who was particularly adept at climbing construction scaffolding, *el colorado* (red) for the color of Dooley's face, *el bigote* (the mustache) for Bob Eck because of the small tuft of hair at the front of his balding pate, *boca sapa* (frog mouth) for George Seeley because of his large jaw and under bite, and *camarón* (shrimp) for the pink color of one of the Venezuelan softball players. The locals would not use such names to an expatriate's face; and I never learned what my moniker was. Probably just as well not to know.

Because the engineering group in La Salina was relatively small, Ed and Frank were frequently thrown into contact with each other. Their polar opposite characteristics caused friction, but little more than that. Frank gave the impression that he was not busy. He would wander through the engineering offices, talking with people or glancing at magazines giving the appearance that he had little to do. Ed, by contrast, worked hard, was serious, and not prone to talk during the working hours. Ed thought that Frank was simply b-s'ing his way to the top. What Ed didn't know, was that Frank wished to give the impression that he had things under control. But when it came time for Frank to make a presentation to upper management, he was ready, having spent hours in preparation. This effort, he largely kept to himself.

Occasionally, one of the engineers would encounter an accounting problem of some sort: for example, a line item needed for the acquisition of materials not included as a budget item, but clearly needed. Such inconsistencies, which are not

uncommon, happen simply because it is almost impossible to get all of the details correct at the time a project is put together. The solution, one would think, would simply be to modify the paperwork. But, acting like guardians of company funds, accountants often like to follow the rules. Moreover, they are more likely to be chastised for allowing unauthorized expenditures than for helping "get the job done." At least that was how we engineers felt about it. One day, when such a problem arose, one of the engineers and I went to the accounting office to make our request for such a change. There, we encountered Jack Sunderland for the first time. To our surprise, he patiently listened to our problem, why it had occurred, and what we wanted done about it. He said, "Give me some time to look into this. I think I can find a solution." And he did. And what a surprise. Finally, we had found someone in accounting who was on our side, not one who was simply trying to cover his back side.

Well, Jack was more than a helper in solving our requisition problems, he was impressive in other ways. In his mid-twenties, he came to Venezuela shortly after graduating from UCLA with a degree in business administration. He was tall, emaciated-appearing, but handsome in a way, venturesome, and extremely bright. He assimilated quickly into the local culture, learning more than enough Spanish to just get by, made friends with the locals, and read voraciously. Unlike most of my friends here, he was not athletic. His venturesomeness revealed itself as a result of an unexpected encounter one evening when he, along with others in camp, went aboard a German freighter that had docked at the industrial area's pier. We in the camp had only recently been favored with such arrivals because of the recent dredging of the sand bar at the mouth of Lake Maracaibo. The ship's canteen was open to us, serving strong German beer, *rollmops*, strong cheeses, thick-crusted bread–all items not readily available to us. There, Jack met Rosmarie, a lovely young Swiss girl of about his age: dark eyes, bobbed dark hair, trim, a friendly, inquisitive look, and fluent in English. She was by herself, one of perhaps two

dozen passengers who had made the trip. Though the ship just docked overnight, Jack was able to make enough of an impression on Rosmarie that she gave him her Switzerland address.

Several months later, Jack took a short leave of absence and flew to Europe where he called on Rosmarie. The family welcomed him then put him up in their home, though they must have been weary about doing so given the brief encounter between Jack and their daughter. Unbeknownst to Jack, Rosmarie was already engaged! But Jack's charm won out and by the time he left two weeks later, Rosmarie had broken her engagement and had become engaged to Jack. Who knows how the other engagement might have worked out. But marrying Jack lead a to long, exciting life for the two of them. Jack once told us about walking with Rosmarie along a street in some Swiss city in which she responded to him in the language she was overhearing. Typical of many Swiss she knew some six languages. After the marriage, they returned to Western Venezuela, where Jack became the District Accountant in Maracaibo.

Camp life was good, provided one did not dwell on what one had left behind. I soon concluded that two types of expatriates work overseas--those who find an interest in differences, which are plenty, and those who find fault with things different from what they grew up with. Along with finding interest in things different, is patience with things that do not function as well as at home. In fact, coping with overseas life takes a *long patience*. Along the eastern shore of Lake Maracaibo, we had the company clubs at La Salina, Tia Juana, and Lagonillas. We also had access to the Shell club with its English influence including occasional cricket and soccer games replete with afternoon tea. We also had access to the small Mene Grande club, and the up-scale Creole club in Maracaibo. Major holidays would sometimes bring Latin dance bands from Caracas, which was especially interesting for those of us who liked to dance. In our mist was Serge Oliver of Creole's Personnel office--a middle-aged Cuban with his salt and pepper

hair who could not be beaten on the dance floor. Swimming at the ample-sized pools at some of these clubs was a year-round activity, especially frequented by the camps' children.

While most of us liked being with Creole, there were drawbacks—some serious, some not. Among the latter, adjusting to Christmas in hot, summer weather was not easy, even though the company did what it could to make the season festive, such as stringing Christmas lights on the oil derricks. They really didn't look bad, once you got used to them. Though not dwelling on it, I also missed such things as Campbell's tomato soup and A & W root beer floats. Bothersome, but not serious, was being subjected to occasional road blocks by the *Guardia Nacional* (National Guard). Such incidents were periodic reminders that "PJ's" dictatorship limited our civil rights. A story making the rounds was about a local political activist who would check himself into the local precinct whenever some political disturbance occurred simply because he knew if he didn't do so, the police would soon be around to take him into custody.

On a more serious note, should an expatriate have an auto accident involving death or serious injury to a Venezuelan, Creole would make every effort to get to the scene before the local police did and fly him out of the country. Otherwise, who knew how long he would be locked up or what amount he would have to pay. Then there was Venezuelan justice for heinous crimes. Since Venezuela did not permit execution for murder or other serious crimes, the police would get around this inconvenience by taking the suspect to the scene of the crime then shoot him when he "tried to escape." Or tragedy could come unexpectedly as when the nine-year-old daughter of our Superintendent died on the operating table in Maracaibo while undergoing a routine operation to remove her tonsils. The doctors didn't realize she was hemophiliac! In sum we enjoyed ourselves in this foreign

environment, but we knew we were subject to greater risk and had left our rights at the U.S. border.

Also, work conditions could be dangerous, but not necessarily for me. Occasionally, though not frequently, an oil well would blow out emitting gas from the well head, and catch fire. This usually resulted in several workers being burned so badly that they soon died. Once, a student of one of the families who came back to La Salina during vacation found work with one of the contractors and died while working on a pipe line when the pipe fell off its support and crushed him. Driving up and down the two-lane tarmac roads between the ferry and Lagunillas at night could be dangerous. The road base was inadequate and much of the surface little more than liquid asphalt that had been sprayed over a thin crushed-rock surface. The heavy trucks that used these roads created a mean, washboard effect. At night the asphalt "absorbed" the light and without surface markings at the road's edge it was not easy to see. Making matters worse trucks that broke down, and they often did, would be left by their drivers unlighted in the middle of their lane.

This practice proved fatal for one of our engineers. Orville Heim, whom we were to encounter years later, was riding with his buddy, George. The two of them liked to visit the Lagunillas club where they often drank heavily. On the way back to La Salina after one such outing, their pickup slammed into the back of one of these parked trucks. When Orville eventually came to in the hospital, he found that the left side of his body was pretty well smashed up. He asked Rosemary, his attending nurse who was a novice in the Catholic order, what happened to George, who had been driving, and would therefore have received more of the force from the accident. Rosemary told him that George had died at the scene. By the time Orville recovered enough to leave the hospital, they committed themselves to each other and were soon

married. Short of being catastrophic, but considered dangerous by today's standards, Creole periodically would send a truck through the camps spraying all of the houses with DDT.

Creole camps at La Salina, Tia Juana, Lagunillas, and Creole Maracaibo had their own fast-pitch softball league. At times we also played against all-Venezuelan teams. We had two former professionals who played on our La Salina team: Howard Guiot had played third base for the San Francisco Angles, before the Giants made their shift from Brooklyn, and Don Berkley had played infield for one of the Texas triple A teams. Catching for me was Frosty Hickey, a Matt Dillon look-alike, who could catch a wild pitch sailing over a batter's head without getting out of his crouch. I had beaten out Frank Chuck as La Salina's pitcher. Frank had good control, but his underhanded pitch was slow and easy to hit.

One afternoon we beat a good Venezuelan team handily. Our advantage was that they had not faced a windmill pitcher before. As a result, the manager of the Venezuelan team asked Frosty and me to join his team in the regional Venezuelan championships. A crowd of Venezuelans came to the large stadium in the workers' camp called Concordia to see the game. Things did not turn out well that night. Even though I pitched as well as I normally did, home plate was *round*. That's baseball slang for an umpire who would not "call the corners." I had a hard time getting the umpire to call a strike unless the ball was over the center of the plate, or at least it seemed to me.

The problem was partly my own doing. That morning around 9:00, as luck would have it, I was fussed at a welder in the industrial area. He was husky, middle-aged Venezuelan with a large mustache. At the time I had responsibilities for minor repair work in the industrial area. Though I should have operated through my *capitaz* (straw boss), he wasn't around so I had asked the welder why he was just

sitting there. He had been given a job order to weld climbing lugs on a power pole. He said he was waiting for his helper to start the welder's motor. I said in my best Spanish something to the effect, "Good grief, do you need a helper to do something as simple as pushing the starter button. Look at all the time you've wasted!" He just glared at me, probably discounting my ignorance of not knowing that craftsmen and professionals in Venezuela *always* relied on helpers to perform such menial tasks. So, in a mild burn, I walked away feeling this to be a lost cause. Just another example of why it was going to take a long time for Venezuela to catch up with the modern industrial world.

Well, when I stepped on the mound to begin my warmup pitches, who did I see behind the plate but this very same welder I had dressed down that morning. When our eyes locked on each others, he just smiled. He let me finish warming up, ordered the game to start, then returned me the *favor* I had initiated that morning. That was the end of Frosty and my contribution to the Venezuelan softball teams. We lost. I can't remember by how much.

I experienced another embarrassment during the early months at La Salina, though not public as was the one above. This also happened in the Industrial Area when I was giving instructions to a large, black carpenter over some task. Trying to explain in Spanish what I wanted him to do, I made the mistake of using the imperfect subjunctive tense. It went something like this: "Si la situación hubiera sido así, lo habriamos hecho en este manera (if the situation had been this which it wasn't, we would have done it in this way)—not an easy construction for me, even today. Finally, after patiently listening to me for what seemed like a long time, this *Trinidadian* said in perfect English, "What are you trying to tell me?" But, of course! English could have been his first language. I had not been in Venezuela long enough to suspect his nationality from the color of his skin and body size. With these two instances behind me, I finally wised up and relied on my capitaz!

Golf was another popular pastime. The courses were crude by most standards. But that hardly distracted from the joy of the game and the fierceness of the competition. When the District Engineer in La Salina first introduced me to the engineering staff, one of those was Dave Pugh One of the first words out of Dave's mouth was, "Do you play golf?" Then, "Did you bring your clubs?" I said yes on both counts. I had been an enthusiastic golfer since I was eleven years old having learned the basics from those I caddied for in Cedar Rapids. The required age to caddy was twelve, I had only *fudged* my age by a year. I had played over the years since then, but never competitively. Playing in Venezuela would give me a chance to *work on my game*.

The next night, Dave persuaded me to quit work at 3:30, a half-hour early, and ride with him along the bumpy, unpaved roads through the outskirts of Cabimas bordered by small shacks till we arrived at a rustic course called El Cují (a local bush). It was an apt description. It was only a nine-hole course, which had been made into an 18 hole course by adding a second set of tee boxes. The course was set amidst peasant shacks from which Latin music wafted loudly across the fairways. Most of the fairways had little grass, being of bare clay, sand, and tufts of scrubby grass. Given these conditions players were allowed to move their ball a club's length and to place it by hand on whatever vegetation they could find. Besides, pipelines crossed the way, electrical power were overhead, and the locals and goats would nonchalantly cross the fairway. Should a shot hit a pipeline or wire, the player was allowed another shot. We would wait till humans were out of the way. Making matters worse was the presence of a nasty shrub called *mala mujer* (bad woman) bordering the fairways with its prickly spines. Just brushing up against one would leave dozens of painful needles embedded in the skin, so small that they were difficult to see and pull out. In time, we scarcely noticed these drawbacks we were so involved in the game.

Custom was to stop at the small open-air, metal-roofed shack that served as a clubhouse to have a drink between rounds. I soon learned that drinking while playing golf was a poor idea, but apparently not for other golfers. During the occasional tournaments, the "Creole ladies" would transform this simple shack into a delightful picnic sight where they would serve fried chicken, potato salad, and all the accompaniments of home.

This and similar courses at Tia Juana and Lagunillas were the site of regular weekend play along with occasional local tournaments. Since we worked only half days on Saturdays golf enthusiasts among us typically would head to the course right after lunch. Then on Sundays we would often get up even earlier than normal and return to play another round. A highlight of the year was the annual tournament across the lake in Maracaibo, which attracted some of the country's top players. One of these, Manolo Bernardes, a young Venezuela whose game was so good that he received an invitation to play the tournament at Chicago's Tam O'Shanter—one of our premier tournaments of that era. An added challenge to these courses was that all of the so-called *greens* were actually *browns* since they were made of fine sand sprayed with liquid asphalt. Now, one would think that this was a drawback. But it was not. The *greens* were so constructed that they putted like greens. Those in Maracaibo were even contoured.

Playing golf with Mel Lord, Frank Chuck, and other golfers was where I had learned to throw a club. Something I don't recall ever having done before, other than a meaningless toss after a missed shot. Mel, who was an excellent golfer about eight years my senior could throw a club as well as anyone. Once he threw a club into an acacia tree and it stayed there. When he told his caddy (we did use caddies there), the caddy said, "Get it down yourself!" Mel had little other recourse than to climb the tree to fetch the club.

Another time, I was the culprit. In one of the Lagunillas tournaments, I missed a putt I thought I should have made. Aiming at a tall pall tree ninety feet on the other side of the green I hit it dead center. The putter wrapped around the trunk. Still having to complete the round, I sheepishly walked over, picked up the U-shaped club and straighten it as best I could. Then continued playing with the crooked putter. That may have been the last time I threw a club—in Venezuela or elsewhere. Later, in a regional tournament in Maracaibo our foursome was following a group of Venezuelans none of whom was playing well. Finally, in exasperation, one of them calmly took his club, bent over and placed it on the ground, then proceeded to jump up and down like a child throwing a fit. So, perhaps club throwing came with the territory.

Once while playing with Frank Chuck, Mel Lord, and a fourth in La Salina, a sudden downpour interrupted our play. When the rained stopped we returned to where we had left off. Upon reaching the green we found a pool of water over an inch deep and extending ten feet around the pin. Mel walked up to his ball just beyond the water's edge as though he were going to putt. The rest of us just stood there wondering what he was going to do. With his usual confidence Mel kneeled down to eye the line of his putt, took aim, and stroked the putt firmly. The ball first skipped over the water right on line, slowed down about six inches from the hole, then gradually settled into the cup. Calmly, as though this were an everyday event, Mel waded through the water and retrieved his ball. Never, in all my years of golf have I seen such a shot.

After one of the tournaments in Lagunillas, I was riding in a pickup with one of the old timers from La Salina. We were taking one of the back roads to avoid the likelihood of being stopped for speeding. But before long, out from the bushes lining the bumpy, tarmac road came a policeman astride his bicycle, rifle in hand.

My companion instinctively stepped on the gas, never even thinking about stopping. We soon outdistanced the policeman and got home without further incidence. The official had no means of communicating with his local station; and we doubted he was able to identify the license plate, even though he probably knew ours was a Creole vehicle. Not all such incidents turn out so favorably. Vicky learned of one lady from our camp who was shot in the behind in the same sort of encounter. The wound was not serious so she took pleasure in saying, "I have gold in my teeth, silver in my hair, and lead in my ass."

I also spent time at the Club's swimming pool. For a couple of months or so I would meet with about a dozen youngsters aged eight to twelve to teach the beginners to get their face under water and to teach the more advanced ones the crawl, back stroke, breast stroke, and butterfly. I am not a particularly good swimmer, but the strokes I taught were the ones I had learned in Navy boot camp. One evening while by myself, I swam 52 laps of the pool relying on a modified crawl that used a scissor kick rather than a flutter kick. After I told my group of youngsters about this accomplishment, mainly to convey how one could use what I had been teaching them to swim a long distance, Alva Muglia, a healthy nine-year-old, subsequently stayed late one afternoon to swim 53 laps. The keen interest of my "students" soon led a small group of us to plan a weekend swimfest that included a whole slate of swimming and diving competitions. The pool was decked out in bunting and we had coaches, referees, parents, snacks, and prizes—the whole lot. We even got the burly George Seely to race with the slimmer Dave Pugh. The reason for scheduling such a race was the continued competitive banter between these two guys, which often seemed angry but was really light hearted. The event turned out to be a great success watched by over a hundred parents and others.

By mid-September I had settled nicely into camp life: enjoying my work, playing softball and golf, teaching kids to swim, dancing with some of the school teachers during Club dances, occasionally attending church on Sundays, and reading in my spare time. Kon Tiki was one of my favorites, and I was about to begin reading The Rise and Fall of the Roman Empire. But then I met Vicky and my life took a drastic turn. This happened at a Club dance as a reception for La Salina's newly arrived teachers. Vicky's aunt, Carrie Lynn, was making the rounds introducing her to those at this social event. The idea was simply to let people know that Vicky would be staying with her and Uncle Bill implying, but not saying, that she might be interested in dating during her stay. Carrie, who was about 35, was tall, slender yet muscular, nicely tanned, and had abnormally large hands for a woman, Word made the rounds that she had once broken a guy's jaw when he made unwanted advances on her. She was the ladies' champion golfer at El Cuji. I occasionally played golf with her and Ed Dooley. Her uncle Bill was short, sturdy, with a modest corporation, and about 50. He appeared brusk, but in fact was a calm, friendly guy. Vicky fondly called him Uncle Bulgy. When Carrie got to me I was standing at the bar having a beer. She introduced Vicky to me as one of the eligible bachelors in camp.

Vicky had large blue eyes that looked right at you, brown hair with a loose curl that used to be blond when she was a teenager, yet dark brown eyebrows, nicely tanned skin, a relaxed, vivacious, and exciting smile that conveyed an eagerness to meet new people. She was perhaps 5' 7" and 125 pounds with a trim athletic figure (broad shoulders with the strong back of the excellent swimmer, which she was, narrow waist, and nicely shaped legs.

After this short introduction I happened to notice her on the dance floor. She had a fluid, exciting way of dancing that was different from anything I had seen before—a sort of alternating up and down movement of her hips. (Later, she told me it was the New York lindy.) I thought to myself, "Wow, there's someone I would

like to dance with. I had learned to jitterbug in the Navy and improved while in college. Most of the steps I had seen were more of a swivelling of hips while keeping time with the feet. By way of contrast, the Latins tend to do more with the upper torso, including forward and backward movement of the chest and shoulders.

Vicky had recently arrived from Long Island and was planning on staying for a few months. She had saved up her money as a legal secretary in Hempstead, Long Island, boarded a cruise ship in New York City and sailed to the Venezuelan port of La Guaira. There, Carrie and Bill picked her up and drove the short distance up the mountains into Caracas. While there Bill and Carrie took her to see some of the popular sights, such as the luxurious Tamanaco Hotel, the Valle Arriba Golf Course¹, and the popular nightclub called *Mi Vaca y Yo* (My cow and I) where her uncle teased her into trying *escargot* for the first time. Then they drove to La Salina. In her innocence she had written to her aunt and uncle that they didn't need to meet her at the ship. She would simply take a bus to La Salina. They just laughed then ignored Vicky's suggestion. Later, Vicky told me that she had stayed up all night to watch their ship pull into the La Guira harbor. Interesting.

My first impression of Vicky left me somewhat confused. She had the composure and appearance of one who might be thirty or twenty. Later, I learned that she was twenty-three. The composure came from having traveled to Austria to visit her brother and his family, having dated West Point cadets, and having worked in a law office and in public relations at Hofstra College. She came to visit her Uncle Bill and Aunt Carrie prepared to have a good time. She had wanted to visit them sooner, but her parents said she needed to wait until she was older, that "life in

¹ I once played the course and was so worried about one of the holes where the landing area for the drive was a narrow area falling off on both sides, because I was not the most accurate driver. But, playing the hole, my drive was *dead center*. But my next shot, a short iron that I hadn't worried about, went over the green and *out of bounds*, a shot I hadn't worried about.

the camps was too wild for a young girl." After she had reached legal age, she saved money from her modest salary and was no longer restrained by her parents. I thought the statement about our wild camp life was grossly overblown.

Eventually, I was told, that Vicky had noticed me pitching at one of our afternoon softball games. Annie Campbell, a long-time friend of Vicky's aunt and uncle, was sitting next to Vicky and said, "There's a new bachelor in camp. I wonder what he's like." Vicky confidently replied, "I'll find out." But I took the first step by going to the Club one lunch break on the outside chance that she might be at the pool. (When I danced with her the first time, she told me she liked to swim.) Sure enough, she was there reading one of Mickey Splane's raunchy novels. I reminded her that we had met at the dance a few days ago. She smiled and said, "Yes, I remember." I couldn't stay long, but before I left she invited me over some evening to listen to some records she had brought from the States. Merlin Rouge was one of them.

For our first date, we hopped into the Chevy pickup the company had assigned to me and drove into Cabimas to see a movie. (Creole routinely assigned such vehicles to its professional staff. We were free to use them as we wished, but with discretion.) After the movie I was showing Vicky what little I knew about the town, when a cop pulled me over. He said the pickup lacked a tail light. During the affair with the cop, I whispered to Vicky not to become alarmed, that I could handle the situation. She gave me a reassuring smile then sat back to see what would happen. I handed the cop 15 bolivars (equivalent of US\$ 5) and he let us drive on. I told her that this is how traffic matters such as this were handled. While not strictly legal, this practice was commonly accepted. We rationalized that such bribes were a way for the local police to earn a halfway descent living, since their official pay was so low. The problem became particularly bothersome at Christmas time when cops needed extra money for presents. We got back to camp,

only five miles away, without further difficulty. I had learned that Vicky was not easily rattled. The next day I took the truck to the shop to have the tail light fixed.

A few days later Vicky asked me if I wanted to go fishing with her off one of the piers in the industrial area. It turned out that there were a group of us, including her aunt and uncle and their friends. The pier stood some twenty feet above the water so that the technique was to either cast with a rod and reel or simple drop a line into the water. Fishing was another popular pastime for oil field workers, especially those living on the lake's eastern shore. The catch were frequently corvina, robalo, palmeto, and catfish. The first two are sea bass of good size, as were the catfish. The *palmeto* is a smaller fish with a silvery skinned body that tapered sharply to an angular tail. Once hooked it puts up a terrific fight usually coming several feet out the water. After we had divided up the fishing gear, baited the hooks, and cast them into the water, I sidled close to Vicky to continue some of the topics we had discussed during our last date. All I got was a few mumbled replies as she focused on the water with the line between her fingers waiting for a bite. After awhile, I moved to another spot on the pier thinking that perhaps I had offended her in some way. Wasn't the case. As I learned later, Vicky loved to fish and had a strong power of concentration. When she fished, she fished. Having grown up on Long Island and being exposed to the water early on. She simply loved the water in all its aspects. She told me that her aunt, Aldona, played with her in Long Island Sound when she was only a year old. Vicky would dig for clams with her father and younger brother, Bobby, in the Sound's inlets. A few weeks later, we drove up north of the ferry landing where we rented a dugout, polled by a young Venezuelan where we fished for perch among the mangroves. By then I had gotten to know her better so that her focused silences no longer bothered me.

At other times, on Sundays a group of us would rise around 5:00, go down to the pier, rent one of the Company's launches, and spend several hours fishing out on the lake. The launch captain tied up at to one of the well platforms, where fish were known to congregate among the supporting piles. The biggest fish I ever almost caught could have been a catfish. When I felt a heavy tug on my line I set the hook and started to reel in. Then, the fish took my line back out and before I knew it, the line had wound round one of the piles. I tend not to drink when engaged in fishing, golf, or the like. Not so with one of those on board. He shouted, "I'll get the line straightened out" and dove overboard. To end this sad, short story, he pulled so hard that he snapped the line. So, I never did know what I had hooked. These outings usually ended around 11:00 when we would head back to camp and cook the fish. Because many in the oil business came from the Southwest, we had hush puppies along with the fish. That and cold beer made a lovely meal. When finished we would return to our air conditioned rooms for a long overdue siesta. Then, after the sun had gone down, we would head for the Club to watch some movie, usually preceded by a news reel showing P. J. cutting ribbons on recently dedicated public works projects.

To get out of the heat once or twice a year we would drive south around the lake and up into the Andes for a couple of nights. There, we found chalets, with good French or German food, cozy bars, ample flower gardens, and cool, fresh air that made us think we were in the Swiss Alps. These modest "mom-and-pop" spots run by European immigrants were like a low-cost "European" vacation. What a life! I can remember more than once while out on the lake thinking how lucky I was to find a job like this. But, I'm getting ahead of myself.

Another touch of Europe was the Italian influence. Italian immigrants who came after World Wars I and II often became small-time operators of restaurants, repair shops, and small hotels. Some turned to construction The Italian men were excellent colonialists in that they worked hard, married Venezuelan women, and lived among the locals. They contrasted with Americans and the English, who

invariably planned on returning to their homeland once they had accumulated enough money to retire in comfort or begin another line of work.

Soon, Vicky joined Ed, Carrie, and me on the golf course. After walking with us a few rounds she finally declared, "If I'm going to walk around with you, I might as well swing at a ball." She quickly picked up the game, which was not a surprise. because she was athletic. For example, although she didn't spend much time at it, she bowled well over 200 at the Mene Grande Club, which earned her the weekly prize for highest score. Her Uncle Bill didn't appreciate her score, for his score was the highest up to that point. In time Vicky beat out her aunt as Club golfing champ, which Carrie didn't much like either for she was extremely competitive. Months later, I would tell friends that I proposed to Vicky because her golf game was so promising I feared that if she met someone who was not a golfer she might not continue playing.

But Vicky was not always the easiest for me to teach, even though she was a good listener and a mimic. Her self-confidence soon caused minor friction between us. One time just two yards off the ninth green, she pulled out a wedge. I told her that was not the club to use. What one wants in chipping to the green is the *lowest lofted* club that allows one to reach the front of the green and let the ball roll. "No. I'm going to use the highest lofted club because that goes the shortest distance and *that's the kind of shot I have*." Due to my infatuation with her, I didn't argue. "Just go ahead," I said. Confident in her decision, she took careful aim, brought the club back far more than I would have felt comfortable doing, and proceeded to knock the ball 18" from the cup. "See!" she said. Now she knows better, having won her share of golf tournaments. But it took awhile for her to come to her senses.

While on home leave and after only 18 months of play, I persuaded Vicky to enter the Pro-Am in St Petersburg, Florida saying it would be good experience. Playing the tournament were Babe Didrikson, Patty Berg, Faye Crocker, and other outstanding women golfers. Up to this point Vicky had not engaged competitively in sports, even though she was good enough swimmer to have done so. tournament day drew near, Vicky's misgivings about having entered any tournament with such little experience began to gnaw on her. The night before found her restless with the typically loose bowels that come with dread of what's to come. I comforted her as much as I could, saying all of this is just normal. "Try to get used to it." Trying to reassure her I said I would caddy for her. Tournament day when approaching the first tee, she heard the announcer say, "And on the first tee we have Vicky Shaner from Venezuela," She about lost it right then and there. Trembling she shook hands with the two middle-aged amateur ladies in her group. Taking a deep breath she addressed the ball and proceeded to dribble the ball about 50 yards down the fairway. She eventually calmed down and began to play better. The other two ladies, who were in their fifties and veteran golfers, were sympathetic. But they must have wondered why Vicky had signed up to play. I did all I could to persuade her to play the second day, which she did. But her nerve-induced diarrhea continued. Finally, after the second round I acknowledged my mistake and agreed that she should withdraw. This decision left us free to follow the pros over the next two days, observe their play and dream about the time we would both be more competitive. Our favorite among the ladies, beyond the Babe, was Fay Crocker. Among the men, we liked the way Julius Boros played, especially his irons with his short, powerful strokes.

Back in La Salina, before all this, I did not monopolize Vicky's time. Her Aunt Carrie had succeeded in introducing Vicky to many of the Camp's eligible bachelors letting Vicky take it from there. She dated widely and often. Most were in their twenties: tall, short, modest, and aggressive. One of her dates was Bobby

Pollack who had come to Venezuela to make as much money as he could in the shortest time possible. One could almost see dollar signs in his eyes. Another date was Mel Lord, handsome 35-year old with touches of silver around his temples. Talkative to the extreme, I have seen him entering a room expounding on some subject without even knowing who was inside. Even so he was one of the more popular bachelors, partly because of his cheerful demeanor and self-confidence. Qualifying as aggressive was Ernie Keeley with a self-admitted reputation for being a rogue. Uncle Bill was one of Ernie's friends wondered about Vicky going out with someone like this, someone who often boasted of his conquests with women. Not only that, but he was built like an ox, with muscles that sloped down from his neck to the top of his shoulders. But, Aunt Carrie, simply said, "Vicky's a big girl. She can take care of her self." Later, Vicky told me that on their first and only date, Ernie propositioned her saying that the only reason for going out with women was for sex. She said, "Not with me." He replied, "What are you saving it for." She replied, "Not for you." That eliminated Ernie as a suitor. There were others that she did not date. Jack Sunderland was one of them. Another, was a handsome, young six-foot Irishman with dark hair and lively blue eyes. Pleasant fellow. I was sure that if Vicky were to meet him, my chances would be over. She maintains to this day that she doesn't know whom I am talking about.

Two others that did not come into play were Rory something and Eddie Fiella. Rory, who came from Southern California, admitted this was not his real name, but said he liked the sound of it. Would look good in lights on a marque. He seemed out of place with his Hollywood clothes and flowing blond hair. We never quite figured out his background, which he kept to himself. He worked in the warehouse, so who knows what his training or education was. But a character he was. His professed aim was to stay with Creole only long enough to enough money to buy a "Cady" ;and expensive clothes so that he could impress the ladies. As a West-coast

trend setter, he coined his own phrases. For instance, when he wanted to leave he would say "Let's *bunch* out of here."

As for Eddie, he was a good-looking Italian and strongly built whom we quickly nicknamed Jack Armstrong. He arrived in camp during the hot summer months. The first Sunday afternoon after his arrival he trotted out to the softball diamond next to the mess hall glove in hand hoping to join in a baseball or softball game. While we sometimes played softball during the day, the majority of our games were in the evening when it was cooler. He looked around, saw nothing going on, then remarked to someone passing by, "Why aren't people doing something? Why are they just staying inside." He remained his naive self all the while I knew him. Later, I was told that he married one of the local beauties who worked in the accounting office. She had a Shirley Temple face and wore clothes bursting at the seams. She looked sixteen, But had to be older to be employed by Creole. The locals called BBB for bust, belly, and behind.

Carrie and Bill lived in one of the nicer types of houses in the part of La Salina called Hollywood. (Single-story houses built conventionally on the ground made up the newer part of the camp called Las Cupulas.) Having lived in the camp since the thirties Vicky's Uncle Bill had priority rights among the different types of homes. These houses were nicely appointed with two or three bedroom, two baths; a large, combined living and dining room, kitchen, and a storage area. All this rested on ten-feet high, concrete columns that were set in oil pots to keep out ants and other crawling creatures. The open area below served as maid's quarters, storage, and patio-lounge. Being off the ground like this, the prevailing winds off Lake Maracaibo, when they were cool, made the patio a pleasant place to congregate. Regardless of how the winds blew, most "old timers" had installed air-conditioning units in their bedrooms.

It was in this setting under the house that I spent many happy hours with Vicky once we began going steady. Particularly memorable were the crab feasts Uncle Bill would put on for his and Carrie's friends. Bill had an arrangement with one of the fishermen near the ferry terminal to supply him on short notice with blue-shell crabs. Once as Bill told it he rejected a few of the crabs because they were lifeless. His supplier's response was, "They're not dead, just passed out." Didn't work. With Bill supplying the "main course" Carrie or their maid would fix appetizers and side dishes. Cold beer was the preferred drink

As Vicky and I were together more and more, we would spend time on the glider swing below the house talking late into the night, sometimes till two in the morning. We talked about all sorts of things—she about her pleasant family life, her mother who liked to read, her father who was an accountant at a bonded-warehouse in New York City, her older brother who was a West Point graduate, her younger brother who had a cleft pallet, her aunt Aldona, and Joe her favorite cousin who also went to West Point. In passing she said she was sometimes invited by a cadet for one of their balls. But we left these events largely unexplored. She said she had no one waiting for her back home, only her job as a legal secretary. She said she had not gone to college because her father thought that wasn't necessary for secretarial work. Even so, she said she had toyed with the idea. Having to be at work by 6:30 six days a week, I soon began to wear out. Something had to give, either give up this routine or propose marriage. It wasn't long before I chose the latter. Vicky has always been a good sleeper, she might stay in bed till noon. So, she could handle our late nights together.

It happened one late night as we were standing on the steps of her Uncle's house just before she was to go inside for the night. Without forethought, I whispered, "Someday we're going to get married." I don't know what got into me, perhaps the lack of sleep or a feeling of competition from her other dates. To my

great surprise, she just said, "When?" "Oh, perhaps in the spring when I'm due for home leave," I responded. "Too long," she said. We finally chose the day after Christmas, the soonest time I would qualify for time off from work. Wow! Just like that, I was to be married. And so soon! I had never done something so precipitously in my life. Having accepted my off-hand proposal, Vicky felt that all sorts of things could go wrong were we to wait six or more months. She said that I would be surrounded by young things while she would be on the shelf back in Hempstead. She hadn't been raised in the New York area without learning something. For my part, I had shied away from marriage up until now because I wanted to work overseas and felt having a wife would restrict my options. Now that I working in Venezuela, and enjoying it, I had no reason to stay single. Vicky was the one for me. Amidst all the excitement I had told her that I would eventually leave Creole, probably to return to graduate school, wanted a career that would take us overseas a lot, and that I couldn't promise her wealth, only an exciting life. "Fine," she said.

Returning to the States after being in Venezuela only for twelve months was not out of the question. Creole policy was to authorize what it called a *short leave* of two weeks after the first year then every other year after that. Employees paid their own travel costs. In between these years, employees received a full month of *home leave*. The month of leave time did not begin until the employee reached the States and ended when the employee left the States. Creole paid these travel expenses. Since the company did not require us to fly, most of us chose a freighter or a cruise ship. By opting to go this way, we added another ten days to our leave and incurred no expense due to the extra cost of sea fare over plane fare.

Though we felt engaged, Vicky and I remained shy about each others' feelings. So, when I suggested that it might not really be necessary for us to seal our engagement with a ring, she demurred. But, as we continued to spend long

evenings together the subject would surface occasionally. Finally, she said, "Perhaps, an engagement ring might be nice." By then I was willing to do just about anything she asked. So, one evening after work I knocked on the door of another bachelor near where I lived. When Tony Kristeki came to the door I told him I wanted to look at his collection of diamond rings. Just as Don Shang, Tony, who worked in the warehouse, earned money on the side by selling jewelry. I picked out a diamond ring of some fraction of a carat that cost \$350--a precious amount for me given my meager savings. Recall, when I arrived in Venezuela, I was in debt. Rather than tell Vicky about the purchase or let her pick out the ring, I paid for it straight away and kept it in my room. Then, I waited for a suitable opportunity to give it to her. Juvenile as it might seem, I waited until the weekend when Vicky and I were to attend a party thrown by the Buzneys, a party with drinks and pasa palos (hors d'oeuvre) attended by some seventy-five of the La Salina "ins." I conspired with Loretta Buzney, who might have been close to my mother's age, to place the engagement ring inside a shell along with the other *pasa palos*. Midway through the evening she brought out the tray, which she offered to Vicky. But Vicky declined! Where upon, Loretta said, "I think it would be in your interest to try one." and pointed to the shell with the hidden ring. Vicky did so, let out an excited cry, and gave me a big hug—all in the midst of those surrounding us. Up until this time our engagement was not widely known. Now our secret was out.

Once formally engaged, the days flew by. Soon, Vicky was to return home and prepare for our wedding on the day after Christmas. All this had happened so suddenly that I hadn't had time to prepare my folks for the event. Earlier, I had planned on meeting them in Guadalajara during my short leave. So, I drew a line across the letter I had begun before meeting Vicky saying, "Change of plans. How about coming to Hempstead for my wedding?" This landed on them as quite a shock for I had not taken the time to even write about Vicky. With our time together and working all day, I had time for little else. Being their only child, made

matters worse. Still, they graciously acknowledged my decision and made their travel plans. The idea about meeting me in Guadalajara resulted from a visit I made there with Julio Castañeda, Lorraine, and two other from our Spanish group in Zacatecas. During our brief stay in Guadalajara, Lorraine introduced us to a friend of hers who had attended Stanford. The friend and I soon found things of mutual interest. So, as we parted company, she gave me her address. And, subsequently we traded letters. Based on these I thought it would be interesting to get more acquainted with her, and Mexico.

Vicky was to fly out of the Maracaibo airport early one morning around the first of November. The night before her flight, Vicky and I left La Salina in the Chevy pickup assigned to me, took the ferry over to Maracaibo, and checked into the Hotel del Lago. My memory is blurry, but Vicky tells me we had adjoining rooms. I do remember that we spent the night apart not wanting to spoil the sanctity of the moments that lie ahead for us. The next morning after she had left, I recall clearly driving down the embankment to where the ferries dock. It was such a lovely morning: clear, warm, and flower scented with all the world looking wonderful, yet sad for the pending loneliness over the weeks we were to be apart.

On her way back home Vicky stopped off in Panama City to visit her cousin, Joe, and his wife Jeannie. Joe had graduated from West Point and was currently on assignment in Panama. Vicky had known Jeannie before her marriage with Joe. So the stopover gave Vicky a chance to see the two and to explore parts of Panama. One day while in Panama City Vicky and Jeannie wanted to mail a letter. Not knowing the way, Vicky began practicing in Spanish the question she would use. They found a passerby and asked directions. She got the question out, but was overwhelmed by the response which came out in a rapid staccato that shocked her. No way could Vicky or Jeannie understand the answer. The person they stopped, hearing the reasonably well constructed question, naturally assumed these two young

ladies knew the language. Vicky had taken a semester of Spanish while working for Hofstra College near her home in Hempstead in anticipation of her trip to Venezuela.

This result, when Vicky told me about it later, reinforced my conclusion that it is easier to speak a language than to understand a native speaker. Why? Because one knows what one wants to say and has time to practice the words in one's mind, whereas one cannot know beforehand what the speaker is about to say and in what form. Over the years to come I found in my travels that those I encounter who are used to dealing with foreigners will speak slowly, enunciate carefully, and avoid using slang whereas those not often exposed to foreigners will not be so careful, thus making it far more difficult to understand.

The days slowly passed until it eventually became time for me to return to the States. Vicky and her father met me at Idlewild Airport (now J. F. Kennedy International). I hadn't thought much about it, but while waiting Vicky silently wondered if I would really show up. We got married in the Catholic church, Vicky having been raised as a Catholic that included attending a parochial grammar school. Although protestant, I was more interested in establishing a religious family environment than preferring one form of Christianity over another. Father Gutier, a Franciscan priest in Maracaibo had counseled us about our plans for a Catholic marriage. Vicky would maintain her faith and I mine, while I agreed to raise our children as Catholics. I did not find this difficult, since I believed that she would have more influence over our children than I.

The wedding took place in a school auditorium because the Lynn's regular church was being rebuilt. Lots of Vicky's family and friends showed up. My dad and mom were there. So were La Verne Stewart, my best man, and his wife, Shirley, and Victor somebody and his wife. I had kept in touch with the Stewarts,

since graduation. We had lived in the same rooming house at Iowa State College for several quarters. Jim Bean, my football buddy, would have been my logical choice because we had done so many things together. But I had temporarily lost touch with him and hadn't had enough time to search for him. Victor was a friend of my parents since show-biz time in New York.

Ours was the priest's first marriage ceremony. In recognition of this first-time, he said, "Let me congratulate this newly married couple by addressing them by their new name, Mr. and Mrs. Lynn. "Wow," I exclaimed, "I didn't realize the Catholic religion was *that* strong. Those who heard laughed. He with slightly redden face acknowledged his mistake. A nice dinner-dance in a local restaurant followed. Vicky said her family had invited only fifty of her relatives, her dad had wanted to invite a hundred. She also said that it was a typical Lithuanian affair: a bottle of whisky in front of every other pair of guests, a band that played lots of polkas, guests pinning five, ten, twenty-dollar bills onto her dress as we danced. My mouth ached from having to smile so much before the cameras. I think it was Vicky's Uncle Joe Wasiak (Aldona's husband) who told me in the greeting line, "Treat her right. She deserves it." After the wedding someone drove us into New York City where we stayed at the St. Moritz right on Central Park. The next morning we flew to Mont Tremblant, Montreal for a week-long honeymoon of skiing, good food, fireside programs, and pleasant surroundings.

We returned directly to Venezuela landing at the Maracaibo airport. We overnighted at the del Lago, a lovely place by comparison with some of the other places in the city. It was there that I heard the Latin beat, cha cha cha, for the first time. I thought it was unique to Maracaibo, not realizing that this new rhythm was popular world-wide. One evening our head waiter, who could have been French, hovered over us, as was his custom, and asked us, "Would you like a little goose?"

We did keep a straight face, but not easily. Perhaps he was not as fluent in English as we had thought.

At other times while staying at the del Lago over night or simply there for an evening out, we would hear about reporters from the States who were down to cover Red Adair, the world-famous oil-field fire fighter, concerning an oil field blowout. We heard accounts about how some of the reporters would write about Lake Maracaibo's "flaming waters" having gained the information safely from their bar stools in the hotel. Blowouts, which often erupted in flames, were costly and dangerous so that Adair deserved his worldwide acclaim. Hollywood eventually produce a film about Adair's adventures on the lake but we never saw it. One sleepy Sunday afternoon Vicky and I were in the hotel's spacious lounge adjoining the bar. We spied a small group surrounding the piano, became curious, and joined the group. Who was there at the piano playing alone, but Pedro Vargas, the famous Mexican singer of the 1940s. What a thrill!

Housing in the camp was scarce, so Vicky and I felt lucky when Scheesley, in upper management had said before we left for the States that he would find something for us. And so he did. He had asked the local Boy Scout troop to move out of its 50' long Quonset hut so that we could move in. He also provided some rudimentary furniture that we could claim as our own. Being newly weds we didn't noticed any inconvenience, including the absence of air conditioning. Still, living under these conditions took some getting used to. One night Vicky got up to sit on the pot. Once there she hear a splashing below her. She jumped off the seat, turned on the light, and found a gecko in the toilet bowl. Another time, not so humorous, was her discovery of a scorpion lying among the clothes she had recently laundered. Scorpions can inflict a painful sting to humans, but a fatal one to the very young. Something to think about given our plans to have our first child before long.

Next door to our Quonset lived a pretty little American three-year old girl who was looked after by a Venezuelan *mamita* (house maid) while her parents worked. They spoke little Spanish; the *mamita* spoke no English. At one point, the little girl had spent so much time listening and speaking Spanish that her parents had difficulty communicating with her. Eventually, the child became truly bilingual. The interesting part is that if someone spoke to her in Spanish, when that person's native language was English, the girl would respond in English; when the reverse occurred, she would respond in Spanish. Somehow she had learned to discern the native language of the speaker.

After nearly a year working in the industrial area I was appointed office engineer, which meant a modest promotion. In this position I wrote job specifications for various types of work in La Salina, such as housing and utility construction in the camps, asphalt paving in the industrial area, and drilling of water this type of work to my liking since I had at one time considered adding a law degree to my engineering degree. (I eventually gave up that idea because I had heard that the combination could lead me into patten law, which looked dull). Not much to talk about here, except my run-in with a young, arrogant Venezuelan below me in grade, age, and experience. One day he came into my office and demanded that I pull together some data for him. I think he incorrectly thought that my position of office engineer was inferior to his position as a field engineer. Rather than argue with him, I purposely misspelled his name when sending around circulars to the engineering staff. My "mistake" had pained his ego resulting in him repeatedly rushing into my office to complain about the misspelling. I think he eventually got the message and our relations returned to normal.

The foregoing minor differences in cultures also revealed itself in other ways, particularly with some Venezuelan engineers feeling that once they became professionals they did not have to "dirty" their hands. Most expatriates grew up having to do physical work, especially those from rural backgrounds. They even prided themselves as not being above such labor. On one occasion, a recent Venezuelan engineer said that he wanted a worker to carry his tool kit while he was working on the lake. When this request was denied him, this young engineer asked to see Frank Chuck, his supervisor. This was a particularly poor request because Frank did not *suffer fools*. Frank also refused to provide a requested worker then asked the young man if he would like to take up the matter directly with the Superintendent. Once there, the Superintendent mainly listened, leaving Frank to make the case. Soon, Frank said to the fellow. "I can see that you are unhappy working with us and I doubt that this will change. So, if you like, we can pay you off at the end of the month, or do it right now." Surprised, the Venezuelan chose to wait until the month's end. I never knew what happened after that.

After completing two years in Venezuela, I qualified for home leave. Vicky and I boarded a mall cruise ship, possibly Holland Lines, in La Guira, stopped in Kingston, Jamaica where we played golf, and eventually docked in Mobile. My folks met us there with our new Chevy, which we had asked Dad to buy for us. Vicky and I split our time with my folks in Florida and Vicky's Dad in Long Island. After about two months we boarded an Alcoa cruise ship out of New York City and headed "back home" to continue our life in Western Venezuela. As was the custom the Steward on the Alcoa assigned us seats for our evening meals. The other two couples sitting at our table were middle-aged. Being so young Vicky and I felt an explanation was in order. We said that we would not have been able to afford cruises like this if my company, Creole, were not paying for it. At one of these meals, one of the ladies raised her glass to propose a toast:

"Here's to life and ain't it grand. I just got a divorce from my ol' man. I laughed and laughed at the judge's decision. He got all the kids and they ain't even his'n."

Vicky and I had just gotten settled in La Salinas when I learned that I would be transferred to the Western Division's Technical Engineering Group in Maracaibo. The move meant another step up the professional ladder. The Tech Group was made up of about twenty in the disciplines of civil, electrical, marine, mechanical, and structural engineering, headed by Emil Paulet, the premier structural engineer in the Western Division. He had designed the platforms that supported Creole's pumps and derricks on Lake Maracaibo. The Tech Group was a regional arm of Creole's engineering operations headed by George McCammon.

During the year I spent with the Tech Group, I developed cost data and estimating procedures that made use of my contract work at La Salina. I also had the job of designing water well facilities to be installed on the lake. The story went around that drilling for water was difficult. Every time the driller thought he had found water, he struck oil instead! Probably just a story, but typical of the extensive oil fields underlying the area. While meeting with my review committee on this project, Bob Zawarsky, head of the Mechanical Unit became tired of my insistence on the correctness of my design. Exasperated, he brought me up short by saying, "Don't bother me with facts. My mind's already made up." Rather devastating when his irony soaked in. Slowly, I was learning about myself.

The atmosphere in our office was sedate and professional with little idle talk. The work day seemed long compared with the hustle and bustle of life in the field. So much was a dull routine. Of course, Paulet's work was creative. But even the structural engineers, such as Dave Estes, spent long, silent hours hunched over their drawing boards. As a result I began thinking that the pursuit of a narrow

engineering career was not for me. In one instance, Phil Lybrook, an electrical engineer who was approaching thirty-five, had followed a straight path from college into the professional position he now held. He seemed burned out. And so young! Yet, he didn't know what else to do. Noting Lybrook's lack of job satisfaction, I determined then and there not to try to force a career of my choosing onto our future children.

But calm did not always prevail. One day the quite was shattered by a curse followed by a thud against a wall. Paulet was the cause of the noise. Losing his patience after trying unsuccessfully to make a phone connection, he had yanked the phone from its socket and threw receiver and all against the wall. He then stomped out of the room cursing, "How can anything get done in this god damned place." Normally, he was a paragon of professionalism. After a short while, he walked back into his office as though nothing had happened. He had lived and worked in Venezuela far too long to let an agitation like this get the better of him. Which brings up a point: getting along in the so-called *developing* countries requires a *long patience*. Those who have it stay; those who don't soon head home.

Life in Maracaibo resembled much more the life one might find at home. After a company-aided search Vicky and I chose to rent the downstairs of a two-story house in a pleasant, residential part of town. The streets were paved, curbed, and lighted at night. Normally the house would have served a single family. The yard was of modest size surrounded by a low hedge of red, double hibiscus. We found it curious how this plant can get started simply by sticking segments of the stems directly into the earth then watering them. A papaya plant some fifteen feet tall had two of its fat fruit hanging from the top.

The upstairs couple, Loren and Betty Kahel and their infant child, were recent arrivals to Venezuela. Loren had been assigned to the Western Division, the same

as I, but our paths didn't cross there. They were not just any young couple intent on making the grade overseas. Loren's father was a senior petroleum engineer with Standard Oil of New Jersey and Betty's father was Standard Oil's chief geologist. Both parents operated out of company headquarters in New York City. Loren had said he came to Venezuela because he wanted to make it "on his own." Little doubt about making it. But on his own? Nevertheless, they were a bright, pleasant couple, just naive in the eyes of the rest of us who had no, nor wanted, such connections. That Betty had lived a sheltered life revealed itself one day when Vicky told her about buying a duck in the local market. Betty, frowned, pondered awhile, then her face lit up. "Oh, you mean like Roast Long Island Duckling?"

I joined a car pool with four others in our neighborhood to go to and from the office. We discussed work, told stories, and talked about forming a group to study for the professional engineers' exam. Dick Mc Collum, an electrical engineer, said he had read in some science journal about the US military worrying about an experimental plane whose wings kept falling off during high-speed trials. After months of study and adjustments, these failures still occurred. Finally, those responsible advertized that an award would be given for whomever was able to find a solution to the problem. They tried many alternatives. Finally one of them worked. The solution was to drill evenly spaced holes in the wing near the body of the plane, which was where the failures had occurred. When the winner revealed himself, they were shocked to find that he was not a noted scientist, but simply a janitor. Recovering from the shock, they asked the janitor how he had come up with the solution. "Simple," he said, "in my years of experience I have found that toilet paper never tears along the perforated lines! What fooled us all was the serious way in which Dick had told the story, never revealing, until the end that this was bogus and *not* found in a science journal.

As for the professional engineers' exam, which had some importance within Creole, but more importance if and when we returned to the States. Bob Kimmons, civil engineer, and Bob Zawarski, mechanical engineer, obtained sample questions from the Professional Engineers Society in the States. We would work them out at home then meet as a small group to discuss them after work. What impressed me was this degree of professionalism among my associates here at the Tech Group--something I had not encountered to this extent in La Salina.

Vicky began shopping at *Todos*, the supermarket grocery store just down the avenue from us. The Rockefeller brothers had helped the store get started by supplying capital while providing quality beef from their livestock operations in Venezuela. The store catered to expatriates mostly, but some of the more well-to-do Venezuelans shopped there too. Shopping here was similar to shopping back home. This in contrast with shopping for food at the Commissary in La Salina. There Vicky could buy items commonly found in the States. Few expatriate housewives bothered to shop at the local market in Cabimas.

Because the pace of work in Maracaibo was less than in La Salina Vicky and I had more time to ourselves. We joined the Maracaibo Country Club so that we could play golf. Unlike *El Cují* in Cabimas, we had to formally apply for membership and be accepted and pay a membership fee and monthly dues. Neither one of which amounted to much. The big difference between *El Cují* and the Maracaibo Club was that now we mixed with a more diversified group—Venezuelans and expatriates from different countries and organizations. The course had better "greens" in that the surface was often undulating and more consistent, but still sand. But the fairways were even worse than those of *El Cují*. They were sandier and contained more sand burrs; consequently, players were allowed two club lengths in the search for a place to place the ball. Before long I had found others to form a fine foursome: they were Neal, Fleetwood, and Red Ritter. Neal was the

reigning Club Champ. He tended to be wild off the tee, but had an uncanny way of reaching the green on subsequent shots and sinking long puts (the flat terrain and scrawny trees allowed such things). Fleetwood, who worked for a drilling company, was a mediocre player with Popeye forearms and a glaring look that unnerved Vicky. Red, an accountant in Creole's regional office in Maracaibo, was Charlie's older brother and a rapidly improving golfer whose progress we liked to watch.

I soon sought out Creole's Maracaibo softball team. I knew some of the players since I had played against them in La Salina. Nearly all of the team were expatriates. Dale Garner, an senior accountant for the Western Division, was its pitcher. His windmill pitch had plenty of speed and he had good control, a nice combination. But he relied on a single pitch so that eventually he could be hit. Even so, his team won far more games than it lost. Consequently, I was pleasantly surprised, when I learned from the Maracaibo team's manager that he could fit me in. I would rotate games with Dale. It was at this point that I added a change up to my fast ball. I tried to throw the change up with the same motion as my fast ball. But instead of rolling my wrist to produce what amounted to a slider that dropped and moved to the right just before reaching the plate, the change up came off the top of my hand. When done right, the ball floated over the plate at about half speed so that batters would usually complete their swing before the ball ever reached them. It was a good pitch when it worked. Because I found it difficult to control I seldom used it. Still, the pitch delighted me when it worked.

Dale and Gloria, his young and attractive Venezuelan wife, lived in *Galbadón*, the original housing complex within the camp for the Western Division's professional staff. Dale qualified because of his senior position and the date of his arrival in Venezuela. The ballfield was located just outside the main gate, which made it convenient. Once during a party at their home in honor of a visiting VP

from Standard Oil of New Jersey's headquarters in New York, Vicky spent some time talking with him nonplused by his importance. On our way home when I asked if she realized who she was talking to. When I told her, she said, "So what? He's just like anybody else,". For my part, about all I could think about was how smart he must be to rise to such a level. Consequently, I scarcely talked with him.

Our second baseman, Dr. Pérez-Amado, was a Venezuelan trained as a pediatrician at the Oshner Clinic in New Orleans The hospital, where he assisted in the deliveries, was only a few hundred yards away from our ball diamond. While playing second base, he had a clear view of his office window at the hospital, *Nuestra Virgen de Coromoto* that was administered by Catholic nuns. Since we played most of our games at night, he relied on a signal from the hospital. When his office window was dark, he could continue playing. But when the light went on, he would return to the delivery room still wearing his baseball uniform. During the day, the signal to return was whether the window shade to his office was up or down.

With more exposure to the Venezuelans, I learned to appreciate their fielding dexterity. While they were seldom the big hitters that many expatriates were because of their smaller size, their fielding ability was superb. It rivaled that of their countrymen who were to become so successful in the States. Well, almost always. Luis Aparicio, who played with the White Sox, came from Maracaibo and played for awhile with the professional team close to where we lived. On occasion a local Venezuelan softball player *would* commit an error; and when they did, the result was humourous--and self-defeating. Once, a player called *Camarón* (shrimp) because of his pinkish skin was playing left field against our team. He let a ball hit to him roll through his legs. Instead of pursuing the ball, he calmly sauntered over to the bench letting the ball roll to the fence while those on-base came on home.

His teams mates surrounded him heaping on insults while he sheepishly sat there absorbing the abuse.

Their tirade was not that he did not retrieve the ball, but that he had missed the ball. A similar incident occurred when the team's shortstop dropped a pop fly. Again, the rest of the team gathered around the player asking why he hadn't caught the ball while our team cleared the bases. What could he say? He simply dropped the ball, not on purpose, of course. But the passion that contributed to the Venezuelan's outstanding defensive plays also contributed to their losses.

Vicky and I began reading the Maracaibo Herald, an English edition that catered to the expatriate community. The paper carried a component of international news, which we read with interest. The local news was often bazaar and gross. The bazaar included supposedly eye witnesses to a banana-eating tiger in his back yard. Another told of watching a flying saucer land and take off. We figured that these witnesses had been drinking too much. The gross showed up in the photos taken of horrendous auto accidents, cadavers, even body parts. One story replete with police photos, was about a middle aged man describing how he had murdered and dismembered his common-law wife. Because Venezuela does not have the death penalty; the police deal with such heinous crimes in other ways. As is common practice, the police with the culprit in tow will revisited the crime scene. Once there, the accused will *attempt to escape* and the police have no alternative but to shoot him dead.

Sometimes Vicky and I would drive northwest to the beach. While the idea sounds nice, the experience was less so. The Carribean water was warm and murky, sand flies and other insects were around, and devoid of bathing facilities. As a result we often had the beach to ourselves. On our way home from one such outing we were stopped for going 75 km per hr in a 60 km per hr zone. I made no attempt to bribe my way out of the ticket because I had been speeding. The down

side was that at some future date we had to pay the fine at the municipality beyond where we had been stopped.

Traveling the road this time to pay the fine I made sure not to exceed the speed limit, thinking that the stretch of road where we got the ticket was a speed trap. On our way back home after having paid the fine, we passed a police car traveling in the opposite direction. The car soon turned around and, coming up behind us, turned on its flashing red light. "Oh, oh, not again!" Pulling over to the side of the road we were looking, I think, at the same two officers that had stopped us before. But this time, I knew we hadn't been speeding. But they said we were and began writing out another ticket. We objected saying in Spanish, "We had just returned from paying a speeding fine." Where upon one of the two thrust the ticket through our open window and said, "Va a pagar otra multa" (you're going to pay another fine). Refusing to accept the ticket, Vicky and I both began shouting at the officer in heated and fractured Spanish that we were not about to be ripped off by this travesty. We simply were not exceeding the speed limit. We'd see them in court before paying another fine. I don't know how we got away with it, but the officers finally put the ticket back in the folder and let us go. The above routine could be endless. You get a speeding ticket even when you weren't speeding. You have to drive to the town to pay the ticket. And on the way, you're stopped again. Fortunately, we had broken the loop.

Vicky and I were not alone in our traffic problems. One evening Tommy Gimmell and some of his friends had come to Maracaibo and were cruising in his red Chevy convertible. This may have been the only car of this type in all of the city. Consequently, it attracted attention. I had met this young Creole engineer when he first arrived in La Salina. He was about my age, clean cut, good looking, and self-assured, bordering on cockiness. Undoubtedly, he was this way because, as we were to learn, he had fought and won most of his Golden Glove bouts. A

local traffic cop, so the story goes, stopped him for some minor infraction and asked, "Let me see your license." Gimmell thought for a few seconds, then said, "How do I know you're a cop; let me see some evidence of who you are." So, the cop took his identification card from his billfold to show it to him. But when Gimmell started to take the card from him, the cop realized his mistake and said, (this is all in Spanish), "Say! I don't have to show you my license." Give it back to me!" Now, both had their hands on the card pulling it in opposite directions. Finally, it tore apart. Infuriated, the cop ordered Gimmell get back in his car and follow him to the police station. Coming to a rather busy intersection, the cop drove right on through expecting Gimmell to follow. But Gimmell had come to a full stop waiting for the traffic to clear. The cop came back, and said "Why didn't you follow me?" Gimmell said that he couldn't get across the intersection. "I'll take care of that," said the cop and walked to the middle of the intersection to stop traffic where upon Gimmell went right on through, and kept on driving, leaving the cop standing there.

Eventually Gimmell was caught and hauled before a judge. The traffic cop who had been offended earlier, presented his side of the story to the judge. When the judge was about to make his decision, Gimmell said something to the effect, "Hey, aren't you going to hear my side of the story?" Then the judge said, "Oh, yes, we can do that," as though the thought had never occurred to him. Gimmell ended up paying a small fine and walked out of court, still the same self-assured guy.

Life in a dictatorship: didn't bother us most of the time. Our lives in an oil camp were fairly well isolated. Of course, we were exposed during trips up and down the east side of the lake, in Cabimas, on our cross-country trip to eastern Venezuela, and the greater Maracaibo region. But we heard stories about Venezuelans who had to put up with this. In one instance, a Venezuelan lawyer of some renown would simply check himself into the local police headquarters whenever a politically tense moment occurred. He felt that he would just save his

and the officials' time, and the hassle, by doing this. Apparently, he was on the government's list of agitators.

On another trip, Vicky, Becky, and I drove south of Maracaibo about 50 km to look at the region inhabited by the *Motilones*. Creole's Tia Juana camp lies directly across the lake. This outing was somewhat risky because this Indian tribe had maintained its reclusive habits up to the present. Moreover, they were practicing headhunters, or so the story goes. They lived communally, counseled in large circular meeting rooms, and hunted and fought using large, strong bows. While lying on their backs the males would hooked the bows under their toes pulling the string to their chest. The metal-tipped arrows were known to have penetrated a one-inch plank. Or so said an article in the adventure magazine, Argosy. Upon reaching the northern edge of their area, which looked like any other rural area around Maracaibo, we decided we had driven far enough and headed home. We really didn't want to find any of the tribe; we just wanted to see the area and to be able to say we had been there. So, it was not without some rationale that those with Creole would sometimes refer to a Venezuelan who had gotten under our skin, as being a headhunter.

We would also encounter another indigenous group. The Guajiro men often sought work as common laborers. In fact, our landlord who was putting some finishing touches on the house we were renting, had hired several of them. The Guajiro women, dressed in brightly colored flowing cotton robes, accompanied "their men" to the site. The would prepare food, care for their children, and otherwise while away the time. The men wore large pom poms to cover their private parts. The craftsmen (carpenters, masons, etc.) were mainly Italians (some recently immigrated from their homeland) who could be heard singing some operatic song. Those helping them directly, such as brink tenders, were Venezuelans whose

favorite phrase would be *Ya vengo* (I'm coming right now). We never found out where they hung out when not attending these craftsmen directly.

In the spring of 1955, after being in Venezuela nearly two years, Vicky received a telegram from her father saying, "Your mother has breast cancer. Pray." With that news Vicky flew back to Hempstead where she stayed for over a month. When it became certain that her mother had not long to live, Vicky decided not to wait, for she was going into her fourth month of pregnancy. This decision concurred with the doctor's suggestion, saying your place now is with your husband. To wait much longer would mean she would not be able to fly home–according to air lines' rules. Upon meeting her parents before she left, she knew that this would be the last time she would see her mother. Within two months of her return Vicky got word that her mother had died. She would not be able to return for the funeral. This was one of the very difficult parts of living overseas.

Came December and Vicky's time to deliver our first child. By Saturday morning December 10th she had broken water and her labor was becoming stronger and more frequent. When we called Dr. Pérez, he said to check her into the hospital right away. It took us about fifteen minutes to get there. Vicky's labor lasted 32 hours, not an excessive time for a first-born, but plenty long given that Dr. Pérez favored natural births and we had gone along with him on this. Vicky's only pain relief came through a gas that she self-administered as needed. She would receive the gas until she dozed and then her hand would fall away stopping the gas. On Sunday afternoon our team was playing a game. Dr. Pérez was at his second-base position when he saw the window shade to his office go up, the signal for him to come to the hospital. I went with him.

Before long, Vicky delivered our first child. We named her Rebecca for no good reason other than its pleasant sound and the remembrance of the pretty, little

girl in Mark Twain's Tom Sawyer. She weigh a healthy 7 lbs and measured 21" long. Standing outside the room Dr. Pérez told me that both were doing fine and that in handling the pain Vicky was *pure steel*. After seeing both of them--Vicky beaming and Becky sleeping peacefully--I returned to the office full of pride telling my friends how pretty she was with her oval face, well-formed limbs, and light tan color, adding that "she looked just like me." Bob Kimmons with his sharp intellect, replied, "Well, make up your mind!" When the time came, Bob and his wife stood as god parents at Vicky's christening by Father Gutier.

Vicky spent five days in the hospital recovering (they did that in those days). Her room mate was an large Italian lady who had delivered several babies before kept moaning, "Que dolor, que dolor!" (What pain, what pain!). She spoke only Italian, but the two of them communicated. She understanding much of Vicky's Spanish and Vicky understanding those Italian words similar in sound and meaning to Spanish. Amazing how resourceful two women can be when cooped up in the same room for days. Within three months of Becky's birth my folks arrived to see their first grandchild. Even at this tender age we dared to drive up to the Andes for a couple of nights in this cool and European-like setting.

Vicky and I had adapted to life outside the camps and were enjoying it. But then one day Earl Nyquist, a senior engineer from La Salina came into our office. He asked me if I was willing to join his team in La Salina to supervise the building of a major construction project there. I had liked working under Earl's direction in La Salina, the project sounded exciting, and I would receive another promotion. I readily agreed. So Vicky and I packed up and, together with our infant daughter headed back to La Salina.

The project involved building two super-tanker piers and an island for oil storage tanks that would supply the tankers. I was to be the supervising engineer

for construction of two piers. The contractor was to be Raymond Concrete Pile, the largest pile driving company in the world, or so I heard. Raymond would drive the hundreds of piles supporting the piers as well as the sheet piles that formed the parameter of the island. Ed Dooley would be the supervising engineer for the dredging operation that would deepen the lake bed while also providing the material for the island. This work was to be done by Gahagan Dredging, a Venezuelan company. McCammon's engineering group in Caracas reviewed and accepted the design by Frederick R. Harris, consulting engineers of New York City, La Salina's casting yard would construct the reinforced concrete piles for the piers and the sheet piling for the island. Finally, the Venezuelan government had agreed to dredge the sand bar at the mouth of the lake so as to allow the supertankers to enter the La Salina area. By lowering the bar, water from the Caribbean would increase the salt content in the northern part of the lake. As it currently existed the lake had a relatively low salt content because of the season inflow of water from the south coupled with the restriction of salt water from the north. Concern over the ecology of the lake was overlooked in those days.

I got off to a good start on the new job. Earl was easy to work with and the early aspects of the project unfolded without incident. I aided in reviewing contract terms, tested samples of the sand going into the concrete piles to be sure they met ASTM² standards, and selected a crew of four inspectors who would monitor Raymond's activities. My daily contact with Raymond was Dan Wilson, who was about thirty years my senior. He was a gruff, burly, red-faced guy who stood about six feet tall and weighed over 200 pounds. He had worked for the company around the world for much of his adult career, something that he soon let me know about. The four inspectors were all engineers, or so we thought. Brent Morse, who was my age, came to Venezuela about the time I did. The other three were junior

² American Standards for Testing Materials, an industry standard for describing and verifying materials used in construction and other engineering works.

engineers and recent arrivals. Steve Fricano was from the States. Felix Moreo Felix was a husky Venezuelan who had graduated from Georgia Tech. Unlike his Venezuelan counterparts, he didn't mind getting his hands dirty. José Martucci was Venezuelan.

Then all hell broke loose. The piles Raymond had driven were "out of specs." That is, they were more than twelve inches from the positions specified in the plans. The problem resulted from the dual requirements: the piles had to penetrate the soil a minimum distance while meeting a minimum resistance. A sounding had been made of the location and we knew the pile's length, so the penetration was easily determined. The resistance was measured by the number of blows per inch of the pile driver's hammer—The minimum depth was require to resist the lateral force of the tankers as they docked along side the piers; the resistance was determined by the weight of the concrete piers and the equipment on them. Raymond obtained minimum resistence easily enough, but couldn't reach the required penetration. The lake's clay soil was too resistant.

Wilson's solution was to weld a nozzle onto a long pipe and jet away the soil where the pile was to be driven. Then, the pile driver captain would drop the pile into the jetted hole and begin driving. All looked fine until the pile came free of the "leads" that held the pile in place while being driven. More often than not the pile would jerk to one side. Sometimes the distance off-line was insignificant. But when the pile was off a foot or more, which was too often the case, it was "out of specs." We soon reasoned that the piles came off-line in this way because the water from the jet had followed the path of least resistance, which was seldom vertical.

When our inspectors advised Wilson that the piles did conform to specifications, he derided them saying they were inexperienced, that the violation wasn't important. Then Wilson would just walk away. The next day when the

inspectors arrived on the site, they noted that the off-line piles were in their proper locations. We surmised that after our inspector had left for the day, Wilson had his crews "jack" the piles back into place—a clear violation of specifications. The jacking was done using a chain wrapped around the pile and pulled by the pile driver's winch. Once the piles were in their proper place, the crew would tighten the metal forms used to hold them there. After discussing the problem with Nyquist, I told Wilson that he *could not* jack the piles and that the contract required them to be pulled and replaced. Unhappy, but resigned, Wilson told his crew to begin pulling the errant piles. When this proved to be too difficult, we finally agreed to allow a replacement pile be driven next to the pile that was out-of-specs. I suspected that Wilson's ill humor resulted partly from him not knowing what to do and partly from Raymond's requirement that he finish the job on-time and on-budget, both of which were in jeopardy.

The reason for not allowing the piles to be jacked back into place was that concrete on the stressed side of the pile could crack, even *spall off*. The result would allow the lake's brackish water to reach the pile's *rebars*. Although these bars were the largest Creole used in casting its piles, in time they would corrode, even break from the repeated blows of the docking super tankers. To understand the extent of the damage, Felix Morreo volunteered to descend forty feet to inspect each of the piles. He did this using a mask, oxygen tank, and a waterproof flashlight.

Felix had the questionable honor of joining *La Ordén de la Tortuga* (The Order of the Turtle). One day while standing by the pile driver, a pulley high in the leads came off and struck him on the head. Fortunately, he was wearing his hard hat. The blow knocked him down, but not out. Although, a dent in his hat caused a deep gash to his head that required stitches, he had survived. Felix took it in good spirits, as was his nature, and enjoyed the fuss Superintendent Wynn made over him

in an awards ceremony. Felix lived next door to us when Vicky and I lived in the Quonset hut. He was fond of saying, whenever someone asked how long he had been married, he would reply, "All my life, brother, all my life!" Such flippancy must not have set well with his wife, for eventually we heard that they had divorced.

It was during these tense days and weeks that a Raymond crew had placed the forms holding the piles in place in a way that restricted the anchor cable of the Creole barge that delivered piles to the project. The solution was simple. All that had to be done would be for the crew to undo the forms allowing the cable to come free. Upon arriving at the scene, a Creole worker pointed out the problem to me. In dismay I went over to Wilson and told him, "Any fool would know better than to trap the barge's cable this way." He just glared at me and said, "Look, Sonny, I'm no fool." I thought he was about to toss me in the lake. He could have and I probably deserved it. But he just turned and walked away. Eventually he instructed the framing crew to loosen the forms and the barge was soon free to move.

Realizing we had a serious problem, Nyquist in consultation with McCammon, decided that the problem was too much for Wilson. So, Raymond sent down Art Fertell from company headquarters. He was one of Raymond's senior officers who would go to the field only when the company encountered a serious problem. From then on, I no longer had to deal with Wilson, which is probably just as well given the above encounter. After several months trying to find a solution to our dilemma, Fertell brought Raymond's activities to a halt. Under advice from company lawyers, he presented a document contending that the problem lie with Creole: McCammon's design of the piles was in error and the construction of the piles in La Salina's pile-casting yard was faulty. Therefore, Raymond could not be held responsible for the cracked piles.

Confronted with this legal claim McCammon hired a consultant, who studied the problem. His report found that pile design was indeed the problem, but through no obvious fault of Creole. When the sixty-foot reinforced concrete piles were hammered with the repetitive frequency that they were horizontal cracks every two feet would *naturally occur*. With this surprising and uncommon finding the two litigants settled out-of-court. I don't know how the settlement worked out for I was soon to leave on another assignment. However, the result must have satisfied Raymond because for years the company used an aerial photo of the completed project as an advertisement in the *Civil Engineering* magazine.

In the midst of all this hubbub, Emory Carlson joined our team. He came to Creole as an engineer some years before I did, progressed rapidly, had taken educational leave to earn a master's degree in civil engineering,, and was now back. Nyquist was naturally glad to have someone of Carlson's caliber on his team. Nyquist made him his assistant, which meant I now reported to him instead of Nyquist. Normally, I think I could have excepted this, except that I found Carlson officious and abrasive. So, I applied for a transfer. My exit interview with Nyquist went well enough. He said he found no problem with my work or effort but that I had difficulty expressing myself. This was the first time I had heard this, but not the last.

My decision to ask for a transfer carried little risk because I had already applied to graduate schools of business at Harvard and Stanford. I thought that we might soon be leaving—not necessarily separating from Creole, but with a leave of absence. For some time I had thought of getting a management degree. What I had enjoyed on the Raymond project, as well as the estimating work in Maracaibo and the office engineer's position in La Salina, suggested that management was more to my liking than design or construction engineering. When I looked to the future, I found more glamor in Wynn's position as superintendent than Paulet's

position as a top-notch designer. Even before arriving in Venezuela, I had heard of someone from Grinnell who had gone to Harvard after he had worked as an engineer for awhile.

One day after work Mel Lord dropped over to our modest two bedroom house in Las Cúpulas with the news that I was to be transferred to Lagunillas with promotion to senior engineer. We would need to move to the newly established camp called Tamare, just north of Lagunillas. Although we anticipated the move, I hadn't been informed officially. Getting the news secondhand did not bother me. Our life in the Creole camps, even in Maracaibo with its city environment, resembled life in a small, mid-western town where neighbors knew much about each others' business. The result was a feeling of community. That we belonged.

As I was finishing up my duties on the Raymond contract, word got out that Martucci was an imposter! He was *not* an engineer and had fabricated his experience as written. He was able to perform his duties as an inspector, because the field work was not demanding and he could write (or falsify his daily reports). He was a tall, good-looking Venezuelan with a charming manner. The wife of our Superintendent, Hugh Wynn, had even thrown a dinner party to show off Martucci's considerable musical talent on the piano. I think, if I can remember correctly, his deception was brought to light when he pressed for a promotion that required he provide additional references on his education and work experience. Luckily, I don't think his job as an inspector resulted in any damage to the project.

Before the transfer, Vicky and I planned the two-week vacation that was due me. Because of Vicky's fondness of the water and the interesting things we had heard about vacations in the Caribbean, we decided on Barbados in the Windward Islands. We left Becky, who was just thirteen months, with Frank and Eleanor Chuck, who were childless but adored young children. We drove our year-old

Chevy south then west through occasional farm land to Barquisamento. From there we climbed to Valencia, located near the lake west of Caracas. We overnighted in a modest but interesting small hotel. Interesting because of the many paintings and memoirs of Simón Bolívar's battles on the nearby Plain of Carabobo. The next day we skirted Caracas and continued on to Maturín which was part of Creole's Eastern Division. This area had been Creole's main producing area before the Lake Maracaibo area was developed. There, we stayed with Charlie and Mena Ritter, who used to live next door to Bill and Carrie. Along this lightly traveled route of open grass lands and scattered trees, we had our first encounter with the boab tree. These were unlike anything we had seen before. The ones we saw stood about 60 feet high with stubby limbs and a trunk that looked 20 feet in diameter. We heard that the trunk stored water, which made the tree able to withstand long periods of drought.

From there we took a short flight to Port of Spain, Trinidad to lay over before catching our flight to Barbados. On the way to our hotel from the airport we passed by lots of shacks occupied with Indians whose Hindu ancestry dates back many generations. Outside these shacks we saw different colored flags whose meaning I have forgotten except for the possibility of being a spot where liquor might be sold. Vicky and I decided we wanted a drink before dinner. So we walked a few blocks through a park filled with large trees to a place that had been recommended to us. The building stood by itself, one story and square with large windows on two sides. Once inside we walked down a few steps to a sun-light room with perhaps fifty tables, mostly filled. The patrons were all white looking British. Succumbing to the atmosphere, we ordered gin and tonics. Finishing that, we ordered and drank another, and soon left. I suppose, in time, one could get used to the stark, dull atmosphere. But it was disappointing.

The next day we flew to Bridgetown, Barbados and checked into a small beach hotel, swam in the ocean, drank rum punches served on the beach by black waiters, played golf, rode bicycles around town, visited the waterfront market, and Sam Lord's Castle. We got around by riding open-air buses with their long, backless benches amidst the dark-skinned locals. On one of these rides we sat next to dignified, preacher-like man in white shirt with a carefully knotted tie. When the bus stopped to take on a few riders, he asked us to scotch up a bit. Then he said in mock seriousness to the heavy woman about to board, "If you like, madam, perhaps I could find a small crane to help you up." If the daggers in her eyes could kill, the guy would have been dead. As was the custom, we used caddies when we played golf. Amusing was the way they could pick up a golf ball with their toes.

For our trip back home we took the northern route, which put us through Puerto la Cruz, Puerto Cabello, and Coro: all on the Caribbean. I don't remember where we stayed or any outstanding experiences, except the journey beginning at Puerto la Cruz was attractive. We found Coro wind-swept and desolate. Anxious to return home, we did not take advantage of Coro's heritage, which dates to the sixteenth century. As the main roads dwindled we resorted to the crude and bumpy unpaved road that followed the pipeline back to the point on Lake Maracaibo near the ferry landing. We knew we had "reached home." But it was dicey getting there. We blew out one of our tires and replaced it with a spare. I slowed down, not that we could go fast if I wanted to, because the remaining four tires all looked bare and might give out at any moment. I don't know what we would have done had that happened, since we encountered no on-coming vehicles for long periods of time.

Upon our return to La Salina, we discovered that Eleanor had "done a job" on Becky. Afterwards, Becky who was only just beginning to talk would come up to us, with her hands stretched out and say, *sucio* (dirty), expecting us to wash them.

Eleanor, among other things, was fastidious when it came to cleanliness. She had joined Creole several years earlier as a school teacher, married Frank, and stayed on. She could be fussy to which Frank, who was deeply fond of her, would say, "Eleanor, I think there are more things that you *don't like* than you *do like*."

Recalling this trip, I thought we had stayed in Trujillo in an attractive resort hotel set amidst a coconut grove with a nice swimming pool. Roy and Fran Terman had recommended it to us. But that was another trip, since Trujillo was eighty miles *southeast* of La Salina.³ The Termans were friends of Bill and Carrie and about the same age. Somehow they took a licking to Vicky and me. Roy was an electrician who worked in the La Salina industrial area. He was light hearted and fond of telling jokes. One of our favorites was about his mother who lived on a farm, rarely coming into town. Roy and Fran decided to treat her to a movie, something she rarely did.

As the three of them walked through the foyer with its panels of mirrors, the mother looking to one side smiled and said, "How do." Then she turned to them and commented, "You know, that nice lady who walked in next to us had the same hat on as I do." Another time when Roy was in the Maracaibo hospital for a liver problem he got us to sneak in a quart "spitting" can for the tobacco he chewed, even though his doctor had told him to give up the habit, at least while in the hospital.

We soon packed up our things and the company moved us to a somewhat larger single family house than one we had left. The Tamare camp had been recently carved out of the thick jungle, which made it much hotter than in La Salina. The breezes off the lake just didn't get to us. Without air conditioning, we found living there uncomfortable. The house was equipped with ceiling fans in the family room and bedrooms, but they didn't help much. I began to consider installing an air

³ The Termans used this as a welcome and relatively close, get-away from the ordinary routine of camp life; not nearly as far as our trips to the Andes.

conditioner, at least in our bedroom and Becky's. My idea of acclimatizing ourselves to heat as did the locals wasn't working out. By the time we left Venezuela, I had begun to feel weighed down by the heat. In this early stage of our life together, Vicky went along with my preference on this, but she was beginning to think enough was enough. Consequently, it didn't surprise me when coming home from work to see Vicky sitting outside the house talking with one of the neighbor ladies.

One evening Becky tripped on a rug, fell forward from our couch against a wooden coffee table, and split her chin. The blood gushed out. She cried, Vicky attempted to comfort her, and I took a closer look at the wound. The gash looked to be three-quarters of an inch. If we took her to a local doctor, if we could find one at this hour, he would surely stitch up the cut. Vicky and I shuddered at the idea. So, Vicky applied the antiseptic and I took a piece of adhesive tape, made a butterfly twist, fastened it over the cut. The wound closed, the bleeding soon stopped, and now the scar can scarcely be seen.

The engineering crew in Lagunillas was considerably smaller than either the crews in La Salina or Tia Juana partly because the camp, which served the southern portion of the lake, had fewer activities. La Salina had its large marine maintenance shop and pile casting yard and Tia Juana had its drillers and petroleum engineers. One of my first assignments was to design and see over the installation of an air conditioning system for the Superintendent's home. I knew little about air conditioners, but could read specifications so the assignment was anything but daunting. Nor did I feel challenged by the responsibilities of the half-dozen engineers under my command. Compared with the multi-million dollar project I had just left in La Salina, this assignment was small potatoes. But my feelings about the new job may have been overly influenced by my decision to return to graduate school. In any case I was ready to leave when the time came.

Even so, I enjoyed my association with Paul Sabbot, who was one of the other senior engineers several years older than I. He was a hulk of a man with a gentle nature and catcher for the Lagunillas softball team--a no nonsense position. I knew him from the games our La Salina team routinely played against Lagunillas, as well as from our various golfing tournaments. His presence in our small engineering group made it easy for me to fit in.

My application to graduate school required that I take the Admissions Test for Graduate Study in Business to be offered in Caracas in February, 1957. This would be a nice break for Vicky and me, for I intended to take her with me. I also hoped to play in the up-coming pro-am tournament there since my five handicap qualified me to play as one of the amateurs—something I had never done before. Unfortunately, the day of the test coincided with opening day of the tournament. If all went as scheduled I had an hour's leeway between the end of the test and when I had to register for the tournament. I decided not to risk it, and backed out of the tournament. Hardly a difficult choice given the long-term implications for my career.⁴ With the test out of the way, Vicky and I drove over to the Caracas Country Club where the tournament would be played. The drive over there was past large homes with magnificently manicured lawns amidst an abundance of stately trees.

Once there, Vicky and I chose to follow Roberto De Vincenzo from Argentina who was one of the favorites to win. He looked so calm, strong, and masculine together with his charming crowd-pleasing smile. My recollection was that he was

⁴ I eventually got the test results. They showed I ranked only in the 38th percentile verbally, the 74th percentile quantitatively, and 54th percentile overall. The low verbal result was not a surprise, since I hadn't been an avid reader; neither was the good quantitative result a surprise for I found math relatively easy. My only comfort for not ranking higher overall was that this was a test administered to those applying to graduate school.

competitive until the end of the last round but then narrowly lost. Flory Van Donc, a Belgium, won. We also liked watching Jim Ferree, a contender in his mid-twenties. He struck the ball well and was in contention. On one of the holes he duck-hooked his ball into the woods whereupon he cursed and flung his driver some fifty yards down the fairway. When he did this his girl friend, who was standing next to us, said, "The club slipped out of his hands." Oh, yes, we know what that's like, but we kept the thought to ourselves.

The densely forested area in Tamare was only a few hundred yards from our house. We could see monkeys swinging among the branches. Our neighbor had bought a small monkey and kept it on a leash attached to a clothesline just on the fence that separated our two houses. Our lots were small, so that the fence was perhaps four feet from hour bedroom window. One day while Vicky was in the kitchen she heard a commotion in our bedroom. Going there she saw this monkey standing on the dresser with a bottle of perfume in each hand. Upon seeing Vicky the monkey let out a screech, threw down the bottles and tried to crawl back through the opening in the screen where it had entered. We finally had to get the neighbor to lead the monkey away. Yes, life was wilder in this camp than in the long-established La Salina camp.

Because our housing rested in an area that had been jungle not long ago, we also thought we might find snakes in our yard. The most feared, especially by the locals was the bushmaster which often exceeds six feet in length.. Reportedly this aggressive Pit Viper is the largest and most deadly of venomous snakes in Latin America. Then there is the coral snake whose bite paralyzes the victim's nervous system that can often lead to death. The upside is the snake's small teeth, which means it may have to chew back and forth to break the skin before its poison gets injected. Even so, this could be done to a child Becky's age. We never encountered a bushmaster, but I did see a small snake in our small front yard with the brightly

colored bands around its body. This snake might have been the harmless scarlet snake, which looks much like the coral snake. The main difference: the color of the banded coral is red, black, and yellow, while that of the bands of the scarlet snake are red, black, and white. I never got close enough to find out which of the two types it was.

It was here that we heard the story about a hunter shooting a small monkey in a tree. The bullet pierced the monkey's chest without killing it instantly. The guy tells about the surprised look on the monkey's face. It screeched, put its paw to the wound, looked at the blood, then took some leaves from a branch, and stuffed them into the wound attempting to stop the bleeding. Just as a human might do. The scene was pathetic. The hunter said, after that experience he would *never*, *ever* shoot a monkey again.

Since Tamare was a new settlement, its residents, all Creole employees and their families, had yet to build a club probably because the one at Lagunillas was so close. Had we planned on staying longer Vicky and I would have made an effort to get more acquainted there. Instead, we would often go into Ciudad Ojeda, which was not far from our camp's entrance. Small as this town was, it had a couple of fine restaurants run by Italian families who had become Venezuelan nationals.

My rejection letter from Harvard came as a shock. Up to this point, I had been able to accomplish what I had set out to do even though, as with Creole, it took me two years to accomplish. I quickly wrote back to admissions saying that I was serious in my desire to attend there, that I had prepared myself for this next step, and that I thought I would be successful if given the chance. Meanwhile, all was not lost for I had already been accepted at Stanford. I was therefore not overly disappointed for I had been to both the Harvard and Stanford areas. The Stanford area was much more to my liking with its Spanish decor, aromatic eucalyptus, and balmy weather. By contrast, I recalled the Harvard area, when I was a teenage with

the Cedar Rapids drum and bugle corps, as being cold, overcast, and drab. In short, I could be happy at Stanford, although I thought Harvard would give me a better education along with the prestige from having graduated from there.

Before applying to graduate school, I had thought about taking off for six months to see how good I could become in golf, since my handicap had been dropping steadily. The timing conflict between taking the Admissions Test and playing in the pro-am brought me to my senses. I opted for graduate study. This had to be a good decision, given the level of competition on the golf tour.

In my routine departure meeting with Personnel, the officer asked what motivated me—supervising the building of a fine structure, or the money I made from the effort. I told him the former, that I figured I should learn something about management if that was where my career was heading. Thus, my desire to return to graduate school. I didn't tell him that I couldn't get excited about working for an organization whose main objective was earning money for its stockholders. I aspired to something more, although at the time, I wasn't sure what that something was.⁵

Ever the dreamer, now that we were definitely returning to the States, I thought about the possibility of driving around the periphery of South America. I got the idea from reading about some guys making the trip in a jeep. The idea was to drive up through the Andes into Colombia, down along the Pan American highway through Ecuador, Peru, and Chile, over the mountains into Argentina, Uruguay, and Brazil. I figured we had enough money for such a long trek. But

⁵ During my 56 months with Creole, I held seven positions, starting as an engineer-in-training and ending as a senior engineer. These positions chronologically were two months as understudy to Don Sheng, three months as pile-driver engineer, fourteen months in the industrial area, eight months as office engineer, twelve months with the Tech Group, eleven months on the Raymond contract, and four months on little worth remembering in Lagunillas.

Vicky called me up short, saying I was out of my head, especially since she would be five months pregnant at the trip's start.

So, we settled on driving up the Pan American highway in Central America. To do this, we arranged to sell our '54 Chevy and to buy a new Chevy to be shipped from Mobile to *Puerto Limón* in Costa Rica. That was the logical starting point, since there were no roads through the Darién Gap in southern Panama.

By the summer of '57 we sold off our belongings, paid visits to our friends up and down the eastern shore of the lake. It only remained for my associates in Lagunillas to give us a despedida (farewell party). That's the local term for a farewell party for those leaving for home. Besides lunch and a few kind remarks attended by about twenty of my fellow workers and their wives, they presented us with two one-ounce gold casique coins of Venezuelan chiefs. At the time they were probably worth the going price of gold, which was 32 dollars an ounce. Now, with the great appreciation in the price of gold, they are much more valuable. value to us is the recollection of that send off. The only sour note in our departure was being conned by a Canadian from one of the other camps. We had agreed to sell him our car for a modest price as long as we had its use until a few days before we were to depart. On the day he came to pick up the car he said that he wanted us to transfer the car's insurance policy to him. We had planned on asking the insurance company for a refund for the remaining months, which we expected to be several hundred dollars. When he refused to pay us for the value of the policy, he said, "Okay, we'll call off the deal." He had us! With little time left to dicker, we gave in to his demand. While costing us what in those days was a fair some of money, we had learned a lesson.

After all was in place, I had time to ponder my progress with Creole. I wondered about my in interest in sports as compared with engineering. In a way,

my success in sports influenced my engineering advancement. I suspect Frank Chuck, whose career was far more successful than mine when it came to engineering, helped advance my career with Creole simply because I could out-pitch him in softball and beat him in golf. Frank was just competitive enough that this impressed him. I was also able to accomplish things while working in the industrial area because of my softball prowess. When I had occasion to go to the welding shop with a work order for Shorty Marrou, head of the shop, I might encounter John Foley, superintendent of the industrial area and Ross Campbell from the electrical shop. These were hands-on guys who didn't cotton to engineers or other professionals. They knew their job, did it well, drank at the Club, and were happy with themselves and their position in life. They were wont to give us a hard time when coming to them with a work order. So, when I would find them in Shorty's office I would listen to them talk. Often, their talk would shift to our last softball game. Since Shorty umpired behind the blate, we occasionally stared each other down. John and Ross would then enter into our discussion. Sensing the time was right, I would give Shorty my work order, which he invariably would take care of. These "successes" had nothing to do with my engineering ability, only my athletic ability. Even though I had risen to the rank of senior engineer, I never felt I was a good engineer. Never did, still don't.

Epilogue

Frank Chuck's confidence about his future was not misplaced. He worked his entire professional career with the Creole-Standard Oil-Exxon group. During his early years he worked on various maintenance and construction projects, He became Creole's Chief Corrosion Engineer, the Assistant Manager of Amuay Refinery, the Manager of the Production Department, and eventually Vice President of Exxon's Production Research Company in Houston. Frank's air of confidence was certainly there, but was softened by the support he gave to those whom he liked. He was generous to his friends, especially those who needed it the most. Frank

and Eleanor financed the higher education of Frank's nieces and nephews and the secondary education of some of their maids' children.

Without doubt Jack Sunderland, the accountant who helped us engineers so much in La Salina, was the most successful of our Venezuelan friends. Jack visited us both in Cambridge and Stanford. He had left Creole and was pondering his next move. He showed intense interest in a variety of books as we walked through Stanford's book store. At the time he thought of working on an advanced degree, which I thought he didn't need. Shortly thereafter, he found a job as assistant controller for American Independent Oil (Amanoil), a company headquartered in New York City with holdings in several Persian Gulf countries. Soon after he joined, the head controller resigned allowing Jack to take on that position, Next, the company's vice president resigned and Jack moved up again to fill that position. While the VP, Jack negotiated a highly favorable contract in Kuwait. When the president resigned, Jack was the natural selection. That gained him wide recognition from the Chamber of Commerce in the US as being of the few who had become president of a major corporation while not yet thirty-five years old. He told me that during one of the company's board meetings, J. Paul Getty, one of the world's richest men who sat on Aminol's board, had invited him to overnight in one of Getty's English mansions. Jack served on the board of directors for the Near East Foundation in New York City and was president of Americans for Middle East Understanding, both for 37 years, and many other noteworthy charitable organizations.

Ed Dooley remained with Creole until 1959 then freelanced till his retirement. After Creole he worked in Iran's petroleum industry on two assignments. In between these two he and his family returned to Ames, Iowa where he worked for a global company that manufactured electronic components. While in Ames Ed also took courses at Iowa State University that might have lead to a master's degree. He

returned to Creole three times: twice at Creole's refinery in Amuay while Frank Chuck was Superintendent, and once near the Orinoco River where he and Mary K lived in a house trailer. Vicky and I caught up with the Dooleys, and some other Creole alumni, in Greeley for the wedding of their surviving child, Diane. Chris, their first child, died from encephalitis caused, they think, from complications of the measles. While they were here, we showed them around Fort Collins. They liked the area and decided to stay, moving into a house just a mile from us.

Mel Lord quit Creole shortly after I did. He moved to New York City so that, instead of dabbling in the stock market as he had in Venezuela, he could devote full time to it expecting to make lots of money. It didn't pan out, but he got rich another way. He met and married Joan, who was secretary to the president of Grace Shipping Lines. Bankrolling what savings they had, they moved to Dallas where he bought two Midas Muffler franchises. This venture was successful enough that he opened a restaurant, which Joan managed. When we visited the two of them many years later they were living in a large house in a nice neighborhood in norther Dallas. Mel was back to dabbling in the market again.

Bill's and Cary's close friends, Anne and Ross Campbell, stayed on in La Salina until Ross's retirement. Then they moved to a modest retirement community in Hilltop Lakes, Texas. Ross, always a social guy, became active in the Lions Club, the community chapel, and the volunteer fire department. Anne continued to be at his side there as in Venezuela.

Shorty and Fern Marrou had moved to Fort Collins many years before we arrived. (Fern called him by his Christian name, Marcel, a revelation to many of us). Welcoming us to town they invited us over to dinner. Shorty died soon thereafter, but Fern lived on for many years. Dale and Gary, their two boys, whom Vicky and I had taught swimming in La Salina, both live in town. The daughter,

Linda, whom we also taught swimming, lives in Denver, as I recall. Interesting how friends and acquaintances may reunite in unexpected places.

The bond of friendship among those who worked for Creole persists even to this day. Retired employees, both American and Venezuelan, have enough in common that they still get together annually in the States at the Creole Annuitants' meetings. There, old hands still play dominoes, liar's dice and, bridge, hold golfing tournaments, and reminisce over drinks and dinner. Invited speakers include upper management from Exxon-Mobile and Venezuelan dignitaries from the nationalized company, *Petroleos de Venezuela* (PDVSA) that replaced Creole. But, the "old hands," who went to Venezuela in the 30's are long gone. Even so, many of the children, brought up in Venezuela, replace their parents at these gatherings, as do those of us who were younger when we worked there.

2/7/06

12/19/16

4/19/17

Chapter 3: The Trip Home

In July 1957, four years and eight months after I first arrived in Venezuela, Vicky and I, with Becky in tow, were returning to the States to begin a new life. The idea was somewhat frightening for me since our romance had centered on our experiences in Venezuela, where we were supported by her aunt and uncle as old-timers in La Salina and the influence of movers and shakers like the Chucks. Vicky had become *family* and I had become part of the *establishment* as much from my athletic abilities as from my progress up the professional ladder. How would we get along once we left the cocoon that this small-town atmosphere provided us? But we were young and unafraid.

Having said goodbys to friends in Lagunillas and La Salina, we loaded our luggage onto a company station wagon driven by a company driver and headed north to the ferry landing . . . only to have our vehicle break down along the way. Unfazed, I hailed a local taxi and loaded our belongings into the trunk and back seat. Although we missed the awaiting ferry, we caught the next one and arrived in Maracaibo only 45 minutes later than intended. We overnighted with the Ritters then caught a mid-morning flight on Pan Am. Our plane landed briefly in Barranquilla followed by the short leg to Panama City. The customs line was long and disorganized. Vicky and I were preparing ourselves for a long wait, when our towheaded Becky began acting up. Screeching, as a year and a half would do. Before we knew it, a customs official waived us to the head of the line where he quickly stamped our passports and waived us through to our plane.

Vicky's Uncle Tony was waiting for us as we exited customs. He was a bachelor who had been working in the machine shops of the Panama Canal Company for much of his adult life. It was through contact with him that Vicky's uncle Bill got the idea of seeking employment in this part of the world. Tony drove us through gently rolling hills with grass about 4' high and occasional bamboo groves towering 60'. Then past old Panama city with its four-foot thick walls and squatters' homes, past the quarters of our US armed forces, those of the employees of the Panama Canal Company; and finally a brief look at the canal's gravity-powered locks. How

strange to feel the cool yet humid breeze from off the Caribbean and how impressive to see the USS Wisconsin docked in the bay. Tony helped check us into a modest hotel bordering a busy street in the center of town, then said goodbye. Our suite of rooms, which we didn't need, was clean, the beds were hard, and the location noisy. From our window we could see below young boys playing soccer in a vacant lot devoid of grass.

The next day we strolled through the down town area past many tourists, probably from some cruise ship, the ubiquitous sailors, and locals, who were a mixture of Spanish, Indian, and Negro. We viewed modern, clean stores, as well as small shops run by dark-skinned Panamanians and East Indian-Hindus with their carved wooden figures, incense, and metallic trinkets. We had heard of political unrest in some of these parts. So, we weren't surprised to see a demonstration consisting of a loud speaker mounted on a pickup truck with about 30 men and women holding placards written in Spanish supporting land redistribution, lower sugar prices, and so on. But the demonstration was peaceful, even to the point that the marchers waited for the light to change at an intersection. Strolling the streets again that evening we saw a couple of sailors propositioning several dark-skinned girls, followed by a combo of small boys about ten years old playing a violin, tom-tom, harmonica, and guitar. While they were good, the group was more enthusiastic than imaginative, since they kept repeating the same tune.

The flight to Costa Rica was short. As we approached San Jose we were thrilled to see green rolling hills interspersed with red-roofed bungalows. In many ways, the city and its environs reminded us of our visit to Maracay west of Caracas, which had been part of our overland trip to Eastern Venezuela on our way to Trinidad and Barbados.

Our accommodations at the *Gran Hotel Costa Rica* were first rate, probably as good as the city had to offer. It was a colonial, five-story building with a veranda along one side facing a small park. Across the street and down a ways was the *Teatro Nacional*. Finally, we were seeing the type of culture I had read about in my Spanish grammar books. Lots of candy, pastry, and tea shops; attractive fruit salad sold on street corners; good locally made beer, wood carvings, and leather work. The main economic strength must be highland coffee and bananas grown along the Caribbean coast. We already knew about Costa Rica's reputation for spending more on schools than on the military.

Sometimes the grandeur of the hotel was almost too much for us, especially when Becky would throw a tantrum screeching and lying down on the lushly carpeted stairway leading down to the main dining room. Once as we were leaving the hotel we noticed a group of what looked like hippies sitting on the veranda. We heard one of them was saying, "They can't treat us this way. We have our rights." Vicky and I exchanged a knowing glance about such naivete and thinking, "You may not realize it, buddy, but you lost most of those rights when you left the US."

The next morning we enquired at the hotel's reception desk about how we might locate the shipping lines responsible for delivering our car to the Caribbean town of *Puerto Limón*. The attendant suggested a local bank. When we talked to a teller there, he shook his head saying that he had never heard of the shipping lines shown on our ownership papers. Next, we headed for the American Consulate. While covering a poorly concealed smirk, the Consulate officer said that there are no roads between *Puerto Limón* and San Jose. The only way our car could get to San Jose was by rail and that the waiting time for a flatcar could be six months! "Sorry, but that's the way it is. Your shipper should have advised you of this when you purchased the car." With fallen faces I pleaded that such a delay was out of the question because I was starting graduate school in two months. He gave us a bored look, suggesting, "Why must I deal with such fools?"

Now, with time to kill, I visited the USA's Point Four office in town. Besides learning about management techniques, I also was interested in international development. Somewhat disappointing was their response--that their focus was primarily on agriculture, sanitation, and health, not civil engineering. Sanitary engineering is a branch of civil engineering, but a specialized one, and I was unlikely to go in that direction. So, I filed this information away for another day.

¹ Named after President Truman's fourth point in an address aimed at aiding poor countries of the world, and the forerunner of President Kennedy's Peace Corps.

Back at the hotel, the manager suggested an agent who might be able to help us. With Vicky tending to Becky, I hopped into a taxi in search of the agent. When I found him he said that his organization didn't handle such matters. But, he knew of someone who might. With directions on how to get there, I hailed another taxi and headed for the edge of town where I found a small, rundown warehouse. Weaving my way through the clutter inside, I spied off in a corner a simple glassed-off office of no more than 80 square feet with a small, middle-aged man sorting papers. In Spanish I explained what I wanted and, to my surprise, he said, "*No hay problema. Puedo traer su auto aquí en San Jose en menos de una semana.*2 Where upon he scribbled the relevant information about our car, the shipping lines, my name and room number at our hotel—all in a small space among the hundreds of other notes on his drawing board—and drew a circle around it. *Oh, yes, I thought. Just another Latino who didn't want to disappoint me.* I left feeling unsure about what had just happened. What should I do next, I wondered?

Eventually, acknowledging our limited options, we decided to take advantage of our time in San Jose. We took a guided tour to Heredia, an historical area close to San Jose, and marveled at the neatness of the countryside and the colorfully painted oxen wheels. Another trip took us to the top of Irazú, an active volcano. This one in a small Fiat that could scarcely make the grade. When Vicky began feeling uncomfortable, because of the effect the altitude was having on her "delicate" condition, I began wondering if driving to the top of this mountain had been wise. But, when she weathered it we were glad we had had this lovely experience. On the way to the top we saw trees draped with moss of the sort used in Christmas decorations, parasitic flowers that could be orchids, cattle grazing lush fields of grass, women washing clothes along the banks of streams flowing down steep mountainsides. All this, and the hazy effect caused by the light drizzle made the experience seem surreal. Standing at the edge of the volcano looking down we could see hundreds of feet below us a red lava lake about 60 meters across without movement, fumes, or odors suggesting it wasn't molten at all. (Years later we read how Irazú had become active again, so perhaps it was molten after all.) Afterwards, we thought how dangerous it had been to stand so close to the edge, for had we slipped there was nothing to prevent us from falling all the way to the bottom.

Finally, after doing what we thought was our duty as tourists that included watching a couple of *fútbol* matches we explored the possibility of playing golf. We had brought our clubs

² No problem. I can bring your car to San Jose within a week!

with the idea that we might play on the way home. By chance we encountered the professional for the local country club who looked remarkably like Chi Chi Rodriguez, whose trademark was, after sinking a put, to shove his putter through his belt loop as if he were a bull fighter. I explained that we had belonged to the Maracaibo Country Club, that I had a decent handicap, and were on our way back to the States after having worked for an oil company for several years. "Sure, you can play at our course. Call me anytime."

We arranged for a baby sitter to take care of Becky then Vicky and I took a taxi to the Club located in a wealthy residential area on the edge of town. I had thought of playing by myself with Vicky walking along. Instead, the pro asked if he could join the two of us. So, sizing me up as a big oil and gas man, as we used to joke about ourselves, he suggested I play him for a dollar a hole. (Doesn't seem like much now, but it did then.) What could I do but accept? To make a long story short, I played poorly and he played as one would expect a pro to play on his home course. I was down about twelve dollars when we came to the last hole. Lying about fifty yards from the hole, he said, "Double or nothing, if I can get down in two." Looking like a pretty good bet, I accepted. But again, what option did I have? So what did he do, but chip in! Probably a one-in-a-hundred shot. Yet, he must have been practicing the shot from there for just such an occasion. "Well," I thought to myself, "\$24 isn't all that expensive for a round of golf with a pro." (But, that was what our hotel room cost us for two nights!) After the round and sipping a locally-made beer, Vicky and I traded stories with the other member of our foursome. He was a Dutchman who said had retired from the Navy, read about the Pan American Highway, drove here in a jeep ten years ago, and had no plans to leave.

After ten days we finally received a call from the agent telling us that our car had arrived and to go down to customs to complete the paperwork. The agent's estimate of the time it would take for our car to arrive had been correct! A customs officer greeted us politely then asked to see our shipping papers. All seemed in order. So, he said in Spanish the equivalent of, "Give me the keys to the car and we can unload it from the flat car." Keys? Our shipper had forwarded no keys in the material he had mailed to us in Venezuela. Before we had enough time to panic, the officer said, "Well, lets look in your documents. If they contain your engine number, we can send someone to the Chevy dealer and they can cut a set of keys for you." Being near the end of the day, he informed us to be sure to return early next morning because a five day holiday was to begin at noon. We did as told, but as the morning wore on, the needed clearances were taking more time than expected. Our worries were beginning to mount because

our cash reserves were dwindling. Besides, we were anxious to be on our way. To our relief, the officer said, "Don't worry. We'll stay as long as it takes to make your car available to you. It's important that we take good care of visitors like you." And true to his word, he and his crew did work about 90 minutes into their *long weekend*. How nice! We could not have expected such treatment even at home. I had thought of tipping him for the extra effort, but remembering my experience in Zacatecas I decided against it. With no such expectations on his part, and with smiles all around, we departed.

We drove off with the warm, rosy feeling one gets from such gracious treatment in far-away places. Whenever it has occurred, and it has more than once, it has made Vicky and me feel "at home" no matter where we are. Before we left, we had read in the local newspaper about the assassination of Castillo Armas, the president of Guatemala. Actually, he was head of a junta that had been ruling since replacing the president. Then two days later, we read about a major earthquake in Mexico City. We already knew about the border war between Honduras and Nicaragua. So, we packed up finally ready to continue our journey without knowing what to expect.

Early next morning we departed San Jose and took the road down out of the highlands to *Punta Arenas* by *Golfo de Nicoya* on the Pacific coast. We were finally on our way in our own car. Reaching the beach around midday, we stopped to walk in the surf. But the beach was dotted with sea weed and the darkish sand was strewn with debris, so we went on our way. Relying on our guide book³ we drove some 75 miles to the lowland town of *Liberia* where we found a quaint, comfortable hotel about a kilometer from the main road that was run by a couple who had immigrated from Europe. Our evening meal was more than ample, consisting of a typical first course of soup followed by black beans, rice with chicken, steak, and macaroni, finished off with fig preserves for desert. Over rich, black coffee following our meal we had a long discussion with a resident of San Jose who proceeded to express his dislike of US foreign policy. He didn't like the dictators of Central America either predicting with his approval that some of them might be assassinated. Their president, *Pepe Figures*, is not even Costa Rican, but *Catalán* (i.e., Spanish), who got into power illegally. The people don't like him. The U.S. supports these dictators by giving them arms, which makes it impossible for us to rise up against them. You call our people communists, but we're not, we're just poor, making less than a dollar

³ It's title went something like Travel through Central America on Five Dollars a Day

a day, which is not enough to live on. As in Uncle Remus's Brer Rabbit, we have been tarred by association. Having this sort of discussion was just what I was hoping to have in traveling through the remote areas of Central America and Mexico.

We soon found the glamorous-sounding Pan American Highway a misnomer. For most of our trip through Costa Rica, we drove on narrow two-lane gravel roads, often driving through shallow streams. When we came to a deeper stream with its bridge a sign leading up to it typically said *puente angosto* (narrow bridge) signifying a single lane. Also, our guide book had suggested that we be on the lookout for *beautiful Indian maidens bathing in these streams*. Knowing Vicky's feelings I did my best not to look for them. As it turned out the only nudes we saw were two bare-assed male truckers facing the road as they showered under a small waterfall. So much for the guidebook.

Traveling through the rest of Costa Rica was relatively uneventful, just long hours on dusty, bumpy roads through scrub-brush terrain, past an occasional village, sometimes livestock grazing alongside the road, and fields cropped in maize that extended far up the hillsides. Customs officials, while generally polite, were puzzled when they couldn't find a tag under the hood of our car, which they normally would find on cars returning to the States after having traveled south. In time we concluded that the tags were meant to control illegal sales of cars purchased below the border. It took some effort on our part to convince them that our car had been shipped to Costa Rica from the States. Becky, with her large blue eyes and blond hair helped us convince these officials that we were telling them the truth, for seldom had they seen girls whose eyes and hair were not dark.

We spent two days in Managua with smoking volcanos in the background. The city was relatively small and quiet. As we strolled the streets over to the market place we saw residents sitting on their front porches reading, talking, simply watching the modest street activity, or, in a few cases a young couple dutifully chaperoned. On one of the days we drove out to a lake where we swam with others who must have come from the nearby city. Next, along with three young men from the States, we visited a site with a women's six-toed footprint embedded in volcanic rock. On the way back to Managua, we passed a couple of presidential buildings: one belonging to Anastasio Somoza Garcia, the former president who had been assassinated only recently. His son, Luis Somoza Debayle succeeded him to the presidency. Another brother, Anastasio Somoza Debayle was either in charge of the National Guard or was the Chief of Police. We

heard that neither son was popular, but that the people feared that if the President and these two sons had all been killed all havoc would break out. Here is another instance in which US foreign policy did not endear itself with our neighbors to the south. President Roosevelt once said of the elder Somoza, "He's an sob, but he's *our* sob." The eldest son, Luis, had attended the La Salle Military Academy on Long Island and graduated from the US Military academy. The other son, Anastasio, was a US-trained engineer. At this time the US feared the intrusion of a Russian brand of communism in the region, and the Somozas were strongly anti communist, as they well might be.

On the outskirts of Managua, as we headed for Honduras, we passed through large fields of cotton, tobacco, sugar cane, linseed, and hay much more suitable for mechanization than we had seen in Costa Rica. We also viewed men on horseback herding cattle, that and the frequent jeeps, making this stretch of our journey look something like the Western USA.

Shortly before we left Venezuela we had read about minor border skirmishes between Nicaragua and Honduras during April and May. And when we visited Vicky's uncle in Panama, he seemed aghast that I would be traveling with Vicky and Becky without some form of firearm. So, as we were approaching the border with Honduras we became apprehensive when a lone soldier with a rifle slung over his shoulder hailed us down. We stopped, which we thought necessary, only to find that he simply wanted a ride to the next village. We casually talked along the way. Upon leaving he said, "Your wife's Spanish is much better than yours." I took pride in the compliment, yet wondered about my own ability in Spanish, given the considerably more study and on-the-job usage that I had over her. In defense, however, she would argue that she used Spanish as part of her shopping for groceries, clothes, and other items. As for traveling without a gun, I hate to think how customs would have reacted, either to my claiming to have one or finding one I had not claimed. Besides, I'm not sure what I would have done with a gun were I to have one. Later, we learned that the reported skirmishes were on the Caribbean side.

Our route next took us along the western edge of Honduras. We opted against taking the spur to Tegucigalpa, which would have meant climbing into the highlands. Instead, we headed for Choluteca in search of a place to stay. By the time we arrived, night was closing in, clouds were overhead, and a light rain had begun to fall. We found this former colonial village nearly deserted. Slowly we cruised through the narrow, cobblestone streets, past an ancient church with brightly colored bougainvillea clinging to its sides, then down narrow streets with bare walls

interspersed with occasional shuttered windows and closed doorways. Finally, we found someone who could direct us to the *posada* noted in our guide book. What we found was a large wooden door at the corner of two narrow streets. The only indication that this was someplace to stay was the small sign with *posada* printed on it. No other indication that this was our guide book's recommendation for those traveling the Pan American Highway. We almost drove on, but screwing up our courage we stopped. My knock on the door was answered by a middle-aged, unshaven man dressed in an undershirt and crumpled trousers. When I asked about staying, he responded in Spanish, "You want to stay *here*?" At this point, we had little choice, so I said, Yes.

The starkness of the exterior of the building was softened somewhat by the interior, which contained a small reception desk, polished floors, a few potted plants, and a small, enclosed patio with chickens idly pecking at the ground. The proprietor apologized for not being able to provide us with a descent meal. He said a strike had shut down much of the commercial activity for the past week. Even so, he was able to provided us with scrambled eggs, bread, and butter. We went to our room feeling better for having eaten, but tired from our long day's trip. This was another shock. The room contained a hammock, a bed that sagged so much that Vicky and I kept rolling into the middle, and a pegs to hang our clothes. The bare light bulb in the room hung down from a single cord that gave a shock when turning it on or off. The only washing facilities were a simple basin and pitcher just outside our door in the patio. The communal toilet was close by.

A crowing rooster woke us at the break of day. We dressed quickly, paid our bill, and were on our way. True to its word, the guidebook's promise of five dollars a day was on the mark. By noon, we had entered El Salvador and, reacting to the previous accommodations, decided to stay in an upscale hotel in the center of San Salvador. As in Costa Rica, this hotel although smaller had the same colonial charm. However, I wasn't able to enjoy the accommodations like I might have because stomach cramps had set in, followed by the *touristas* (Montezuma's revenge). After taking a couple of Lomotil pills and resting, the three of us set out to "see the town." We found the city modern, clean, circular intersections, middle-class, as well as upscale homes, and even a drive-in. Since the latter was a novelty for us since leaving the States, we pulled up to a stall and ordered sandwiches and a milkshake. Now, sandwiches comes out as *sanwiches*, but milkshake was another story. We tried *helado bateado* (beaten ice cream), but it didn't work. We pointed to a picture, tried again, until finally our waitress said,

"Oh, quire (you want) un milk shake." The word, having originated in the English, stayed in the English.

Having rested, eaten well, and my diarrhea largely in-check, we set out for Guatemala City in fine spirits. Our relatively short trip took us through the northern lowlands of El Salvador to the border. Interesting that our passage through customs went so smoothly, given the recent murder of the president. A few days back, the Nicaraguan soldier whom we had given a ride to, said that the conflict going on with Honduras need not cause us concern. Latin American countries may have their uprisings, but they are seldom bloody. Well, that may be true for the public at large, but not for country leaders. Then, we ascended to Guatemala City. We checked into a nice, medium-sized hotel replete with Indian trappings. Once settled, I called on the

Gamaleros, my friends from San Francisco. They invited us to their home for dinner where we reminisced over old times. Bill told about how he had established his own engineering and construction firm and Choli said she knew the wife of President Armas from her childhood days in school.

The next morning we drove west into the mountainous area to visit Lake Aticlán, a deep blue volcanic lake resembling Lake Tahoe with the villages bordering its edge named after the twelve apostles. After checking into a rustic, mountain lodge we strolled along the lake's edge, drew in the fragrant smell of pine, and marveled at the shear beauty of the place. Afterwards we rested in preparation for the next day's trip

Winding our way along scenic mountain roads we arrived at the Indian village of Chichicastenango, a place widely popular among tourists for its weekly markets, the colonial church, and overall picturesqueness. Luckily it was market day. Once there, we parked away from the crowd and made our way to the market. Hundreds of Indians were there, the women dressed in colorful shawls and dresses. We were struck by their small stature, not even coming up to our shoulders. Most wore some form of straw hat on top of their thick dark hair, the women with thick pigtail braids down their backs. We casually strolled, seemingly unnoticed, among the many stalls loaded with fresh vegetables, grains, spices, and artisan goods. All was quiet . . . quiet . . . quiet. Scarcely a sound as the Indians bargained in whispers.

Wanting to take a picture of the market place I climbed the steps leading to the 18th century church of Santo Tomás so as to get a better shot. Winding my way through the candles and smoke streaming from them, I was soon accosted by a well-dressed Guatemalan who told me in no uncertain terms to get off the steps. "This area is sacred." Apologizing, I did as he said. We then proceeded to visit the church's interior with its gilded alters and many wooden carvings. Next, we walked along an arched arcade covered with bougainvillea and roses bordering a patio garden filled with fruit trees. There, we encountered a priest who explained the blunder I had made. He said the Church had allowed the Indians to incorporate some of their traditions into the Catholic services, which had helped them gain influence over the Indians' lives. The practice of lighting candles, sprinkling flower petals on the steps and inside the darken church, and considering the steps as holy ground were some of the superstitions they had allowed. Not so Catholic, however, was the chicken sacrifices offered by a *witch doctor*, in front of a two-foot stone statue at the top of a hill behind the church.

The next morning we wound our way past Quezaltenango, the country's second largest city, situated in a high valley where streams of water ran through lush grass pastures. From there we drove down steep and treacherous mountainous roads into the steaming hot lowlands bordering Mexico. Passing through customs without difficulty we drove on to Tapachula, the Mexican border town. We found it curious that Mexico had constructed its portion of the Pan American Highway fifty miles to the north of us. Apparently, these two countries did not trust each other enough to build a road that facilitated an easy border crossing.

While arranging for our car to be transported to the railroad station, a bellhop representing the single, local hotel approached us. He said he would take care of our bags, look after our car during the night, be sure we were called in time to board the train scheduled to leave at 6:15 a.m., and arrange for the short trip to the RR station. We felt we had little choice but to trust him, even though doing so made us uneasy. Our dinner that night in the rickety hotel consisted of chicken, potatoes, and tomatoes, prepared by the proprietress using a small, kerosene stove.

True to his word, the bellhop woke us at 5:00 and took us and our bags to the station. We climbed into our car on the flatbed and were on our way by 6:15, the train's scheduled departure time. The 130 mile trip was to take the full day. We had expected to ride in our car across the hot, flat, thinly-jungly lowlands, but a conductor told us we could ride in the caboose, which we did. Initially, we took turns sitting in the small turret for a better view and some fresh

air, but soon gave that up as the wind shifted and engulfed us with heavy smoke from the engine. The right-of-way was a single track with an occasional turnout that allowed for trains passing in the other direction. As a result the entire trip was a series of starts and stops, with occasional short spurts at full speed ahead. These jerky movements were not the best for Vicky's delicate condition. Around noon time, the train came to a full stop in the middle of the tracks. We saw about ten member of the crew walking across an open field of tall grass. Assuming they were stopping for lunch, the three of us left the caboose and followed them. Turns out we were correct, we found them seated at tables in a small screened porch where they were being served the local fare of soup, chicken, and beans. Lucky for us, this was only a lunch break and not a crew change!

As dusk was settling in twelve hours after bordering the train we pulled into the small, lowland town of Tonalá covered with soot and splinters from the wood-burning engine. After quickly reconnoitering the area, we decided to take our guide book's advice and drive to *Tehuantepec*. After the first 20 miles driving on gravel roads, with unrestrained cattle grazing along the side, we were happy to reach an excellent paved highway. We arrived at our destination at 11:00 p.m. We found a small, pleasant hotel, ate a quick meal, and went to bed feeling we were almost home. The next day we felt even more so as we met Highway Patrolmen along the way dressed in neat uniforms driving shiny new cars; and when we heard Amos and Andy being broadcast from the States.

Going to the diningroom the next morning we found practically all of the help looked to be pure Indians, with the women dressed in flowing skirts and loose-fitting decorated blouses. Our road out of town was hot and dusty. As a precaution we stopped at two filling stations, but they were out of gas. On the third try much to our relief we got our tank filled up. It was a good thing because we didn't pass another station until we were on the outskirts of Oaxaca 150 miles away. Before driving into the city, we took a short detour to *Mitla*—the site of the ceremonial and burying grounds of the Zapotec and Mixtec Indians. The descendants of the latter supposedly live in the area now. We saw about ten buildings that were uncovered and about 20 whose excavation had not been completed. Because of their excellent condition we found it difficult to believe that the buildings constructed simply of closely fitted stone and decorated with ornamental mosaic dates back to 200 B.C. Indian women and children swarmed around us wanting to sell us whistles and shells as souvenirs for only 25 centavos—a pittance!

Then, continuing in the same valley we checked into a modern hotel on the outskirts of Oaxaca. That evening Vicky said she wasn't feeling well so we retired early. The next morning she was having stomach cramps, which we feared might be the onset of labor pains. Vicky stayed in bed till noon and by then was feeling better. The trauma of a premature birth and the possibility that Tim might be born in Mexico had passed. We figured that yesterday's train ride with its abrupt stops and jerky starts had nearly shaken the fetus loose.

Around noon we drove downtown so that I could buy insurance while in Mexico. Rather than drag Vicky and Becky around town during the search, Vicky said she would look at some of the shops bordering the town plaza then I would meet her at the appointed time on one of the corners. I eventually located an agency with the help of two pretty *señoritas*. Sitting along side me in the front seat, they were directing me to a parking spot near the insurance agency. Without realizing it, we passed Vicky and Becky standing on the predetermined corner. Later, half-heartedly annoyed, Vicky accused me of paying so much attention to these young ladies that I forgot to look for her in her extended, pregnant form and 20-month-old daughter in hand. It was only a minor annoyance although one long remembered.

Later in the day we drove a short distance to the *Monte Albán* ruins, another site of the *Zapotec* and *Mixtec* cultures. Each succeeding civilization built over the existing structures. The whole area for miles around contains earthen mounds underlain by what must be structures similar those already uncovered. What an incredible sight!

We spent the next night and part of the following day in Puebla where we strolled along the busy streets of this modern city. While there we visited a convent that was once hidden from the Government when such institutions were outlawed. Then we drove the short distance to Mexico City, where we saw little evidence of the recent earthquake. Such occurrences are so common that one must look closely to distinguish between recent and earlier quakes. Once in our room on the tenth floor we ordered tequila, limes, and salt from room service. Sitting by our window observing the busy street below we toasted our return to modern life in traditional Mexican fashion. First we licked the back of our left hand, applied salt to the wetted area, downed a shot of tequila, then squeezed lime juice into our mouth. Or, maybe it was tequila, then lime, then salt. The effect is the same.

During the next two days, we visited Chapultepec Castle built during the reign of Maximilian and Carlotta, the National Museum, the University of Mexico, a bull fight that the local press dubbed, "As always, when there are bulls, there are no *toreros*!", and Xochimilco's floating gardens. At the bull fight an impatient youngster jumped into the ring with jacket in-hand, turned his back on the bull, and spread out his jacket. Not fooled at all, the bull struck the intruder squarely in the back flipping him up and over its back. The youngster did a complete somersault landing on his hands and knees. Dazed, he got up, ran to the edge of the ring and scrambled over the barrier. Luckily for him, the bull's horns were so wide apart that neither of them entered his back thereby inflicting no injury. How lucky was the guy! The next day's newspaper revealed the moment-by-moment sequence of the event.

While visiting Xochimilco we encountered a doctor, his wife, and young child, whom we had met the day before. In spite of his curative powers the doctor was so concerned about his daughter's health that he carried an antiseptically drenched cloth to wipe the surfaces of anything the child touched, particularly put to her mouth. We thought his actions extreme, especially when we looked back at a picture we had taken of Becky taking a swig of beer directly from a bottle of beer. (By the way, Becky had made the entire trip in excellent health consuming scrambled eggs, milk, and raw fruit.) The visit to the gardens reminded us of the adventures of David Dodge, who wrote the book, *How Green was my Father*. The story is about his overland trip from San Francisco through Mexico and on to Guatemala. In one episode Dodge describes his effort to buy some grapefruit, which mirrored our San Salvadoran experience. After carefully enunciating the word toronja, which the Mexican vendor didn't understand, Dodge goes on to describe a fruit that was yellow and the size of a softball without success. Finally, the vendor said, "Ah, usted quiere grepfrut, which reminded us of our experience with ordering a milkshake in San Salvador. Returning to Xochimilco, after an drawn out and exasperating haggle over the price of a ride through the gardens in a flat-bottomed dugout, Dodge blurted out, "No quiero buy the damn thing."

Up to this point in our trip, I felt that Vicky's and my Spanish had been pretty good, having dealt with customs officials, border guards, waiters and waitresses, and the like. But I got brought up short in Mexico City when the attendant at a service station quickly rang off the amount of the sale before I had a chance to verify the amount. Before leaving the station I calculated the amount of gas based on the price per gallon and found that it was more than the tank would hold. Even so, I paid, but with reservations. As I was leaving, I heard him tell the

cashier that the charge included a *propina* (tip). Later, Vicky and I saw other attempts to play the same trick. By then we knew what to look out for. Not that the amount was all that much, but having spent over a month en route, we were beginning to get run low on funds. Mexico City was the first time we felt that we needed to guard against such ploys. Undoubtedly, the greater number of tourists traveling between the States and Mexico City was the answer.

The final leg of our trip took us out across the dry lake bed on which Mexico City sits and past the nearby pyramids. Even Vicky, as pregnant as she was, and Becky, as small as she was, climbed the 249 steps to the top of one of the pyramids. There, we had a lovely view of the surrounding area of adobe huts amid squat trees. Continuing on we drove past Tomasenchali that comes out sounding like Thomas and Charlie, overnighted in a modern motel at Ciudad Valles, took the cutoff to Brownsville, crossed into the USA, and headed for Houston. Once there, we stored our car while we flew to St Petersburg to visit my parents with the intention of flying back to continue driving to Stanford where I *had been* admitted to the Graduate School of Business. Always liking the Bay area, I looked forward to returning there.

After the initial greetings with my folks I turned to the mail that was waiting for me. A letter from Harvard interested me the most. Opening it, I read that I had been accepted there! With that being my first choice, I wrote to Stanford about my change of plans then after a short visit with my folks I flew back to Houston to pick up our car. Then I drove directly to Cambridge, leaving Vicky and Becky to join me once I had registered for classes and had found a place to live. Eventually, I was to learn that perhaps a quarter of my class had either been rejected on their first application or were accepted provisionally.

Thus, ended a five-week trip, instead of one taking three and a half weeks. Though unplanned, we were glad to have had the extra time in Costa Rica and to receive the gracious help there in getting our car out of customs and off the train. And it was enlightening to hear how some felt about the USA. While most dismissed the threat to our safety, Bill Gamalero, felt otherwise. He said that his life had been threatened by some who worked for him. But then, he was part of the elite.

Interim57-66 11/8/17

Chapter 4: Interim 1957 - 1966

I flew back to Houston, checked our car out of storage, and drove directly to Cambridge. I registered with Admissions where I never even thought of asking for a student loan. With over thirty thousand dollars in the bank, I felt too rich to ask for financial help, which turned out to be the case. I was given temporary quarters in a dormitory and was instructed to check the class bulletin board. In doing so, I was surprised to find that we were given an assignment for the *first day of class* some three days away. The case study, which is the way the Business School teaches, was the first of hundreds of cases we would study before graduating. After recovering from this mild shock, I began checking apartments in the area from the list I had received.

It didn't take me long to choose an ample, third-floor apartment conveniently located in a working class section of Newton, some four miles upstream along the Charles River. The drive to School seldom took more than 15 minutes. My soon-to-be classmate, Will Hunt, and his wife, Tally, were to occupy the first floor. Our landlords, Mrs. Martelli and her husband, lived on the second floor. Our apartment comprised a large kitchen, a dining room, a living room, a bedroom that opened onto the dining room, and a small bathroom just off the kitchen. In the corner of the kitchen I installed a large working table made up of a plain door supported by two end tables. And for most of the next two years Vicky would see little of me except the back of my head. I would remain at the School during the day, return in time for dinner, then, as soon as Vicky could clear off the dishes, I would be at this improvised desk until midnight or later. After getting Becky off to bed, Vicky would often retreat to the living room to read or watch television. Except for an occasional outing that included School events for the wives it was to be a long, grinding experience for Vicky as well as for me.

Mrs. Martelli was a wonderful person: large, but not obese, with flowing white hair, matronly, kindly, *very Italian*, and a magnificent cook. Vicky would rely on her to look after Becky when she had a sudden need for a baby sitter. How well I remember climbing the back stairs past her kitchen on a cold winter night and smell the rich aroma of garlic and spices that went into her spaghetti sauces. Every week on separate nights each of her three grown sons

would leave their families to have dinner with their parents. Mr. Martelli was a craftsman of some

sort. Each morning he "breakfasted" simply on black coffee laced with anisette. Once a month after dinner Vicky would go downstairs to pay the rent where she would linger for an hour over a couple shots of anisette that Mrs. Martelli insist she have. How nice to pay the rent this way.

The Hunts were Canadians. His father was some bigwig in the Canadian government associated with the building industry. During our first semester, we sat next to each other, since it was expected that we would remain where we had chosen to sit. That allowed the instructors (professors, for the most part) to draw up seating charts that they used in getting to know those in our section of 90. My friendship with Will never blossomed because we didn't think the other knew what he was doing and partly because, in trying to establish rapport, I made the mistake of suggesting that the Canadians were much like us in the USA. Eventually I learned that some Canadians feel our country exerts too much influence over them because our economy is so large and powerful. Even so, we maintained a civil relationship. I found him remarkable in two uncomplimentary ways: one, he deferred looking at his test scores and course grades for as long as possible, claiming disinterest, and two, he proceeded to throw away his class notes and case studies once he finished a course. During the fall of our second year, we were surprised to learn that this rather reserve couple, under the influence of another classmate, had attended a nudist colony during our summer break. It was the Hunts' first experience in nudity, and a disappointing one at that, so Will said. I guess the female bodies that he saw didn't match the beauties he had imagined.

I arrived at Harvard feeling relatively confident, having sailed through high school and Iowa State without great effort because I had not aspired to academic excellence. As a result, I enjoyed a full range of activities in high school and college. At Creole, I had progressed from engineer-in-training to senior engineer in four years. But, HBS quickly took away my confidence as it did many of my classmates.

Our first-year courses were the same for all of us. They were Administrative Practices, Business Responsibilities in the American Society (called BRAS), Control, Finance, Marketing, Production, and Written Analysis of Cases (called WACs). About five weeks into the first semester, our class took its first test—a four-hour exam in Marketing. As was the custom throughout our studies, this was a case study. It involved beer distribution. Afterwards, both Will and I thought we had "nailed it," although relying on far different approaches. I had proposed a marketing study to identify the size and location of the customers, an advertizing program, and so on; I even looked at the trucking costs of delivery. In the process, I had written, "Now, do we have enough trucks to implement the strategy?" This was a critical question that would determine the feasibility of the whole approach. I concluded that *there were enough trucks*. *Wrong!* In my hurry to get through the case, I had misread the table. Some half of the class had either failed to look into this possibility, or had misread the table as had I. No one who missed this point received a grade better than Low Pass. Will Hunt included. It was an early lesson demonstrating that our solutions had to be realistic. If a proposal was not feasible any analysis of other aspects of the case didn't matter. It was a lesson few of us forgot.

But then, marketing turned out not to be one of my strengths. No matter how well I might have done on this test it wouldn't have made much difference. I never did catch on to marketing as a discipline, especially when it came to advertising. For instance, I thought saran wrap was a lousy idea and that airport hotels wouldn't work because of the noise. When it came to beer, I pictured two cowboys sitting on a rail sweat dripping down their faces swigging a cold bottle of beer. For me beer tasted the best when I was hot and my throat dry. So how does Coors advertise beer? Often by depicting cold mountain streams running down a snowy mountainside. Oh well, I didn't want to go into marketing anyway.

The School's strategy seemed to be that of keeping its new arrivals off balance. At the beginning of the second semester, I recall talking with a classmate, Morty Davidowitz, about who in our class would not be there beyond the first year. We had heard the rumor that perhaps fifteen percent of each entering class would not make it. So, we traded ideas about who the 13

or 14 in our section of 90 would not be with us next year. Alike, we said we had looked around during our various classes and had been able to count only nine or ten who might go, which meant that we would be on the cusp. As it turned out, I think only about four from our section did not come back, and that might have been due to their discouragement, rather than dismissal. I know of one, however, who had a nervous breakdown during the second semester, which forced him to drop out. Morty, needn't have worried. He completed the second year as a Baker Scholar-among the top two percent of our whole class. After graduation, Morty ended up the head of a large investment banking firm on Wall Street, became immensely wealthy, and changed his name to J. Morton Davis. He even wrote a book, Making America Work Again with an endorsement on the book's jacket by Walter Heller, Chairman of the Counsel of Economic Advisors to President Kennedy. I dropped Morty a note in preparation for our fortieth class reunion (the only one I attended) asking him if he remembered our early conversations about flunking out, but got no reply. No surprise there. With all that money and prestige, he must have more than enough friends. In glancing over Morty's book again, I realized that he must have been putting me on, for he graduated from Brooklyn College magma cum laud and was a Phi Beta Kappa!

Another method of putting students on the defensive was the practice, followed throughout the two years, of assigning three cases a day. This required the student to read each case, analyze it, propose a solution to whatever problem the case contained, and back this up with his reasoning and supporting calculations. Scarcely ever did the case contain a statement as to what the problem might be. The best guide came from the particular course that assigned the case, e.g., one would look for a marketing problem in the Marketing course, or an accounting problem in the Accounting course. But at times, this didn't work. And at other times we, as a class, might conclude that the case contained no problem at all. But that would turn out to be a mistake. Once in class, the instructor would, seemingly at random, call upon a student to present his analysis. Then, he would look around the classroom at the other students, some of whom would be stabbing the air with their hands showing they wanted to talk, and call on one. While occasionally a fellow student would agree with the opening analysis, more often he would

challenge the presenter's knowledge of the facts, his approach, or recommendations. For an engineer, such as I, taught to believe in a single, correct solution, the initial effect was daunting, as was having to read an average of 75 - 100 pages of case material from the end of classes in the afternoon to the beginning of classes the next day.

Throughout the two academic years at Harvard, our instructors acted as moderators, not giving their opinions but asking questions and *directing traffic*, so to speak. It was as though each instructor were playing an huge pipe organ with its full array of keys and stops. After the instructor had learned the inclinations of the more outspoken members of our class, he would call on one of these for the point of view he wanted to hear. As examples, some were adept at quantification, others were street smart, and others could see the big picture.

We quickly learned a few things during the first semester. One was to not bother asking the instructor what the answer to a case might be. Invariably he would return the question with, "What do you think?" Before long, we learned that in a business setting, there were few right answers, but many acceptable ones. The School's aim was to instill a way of thinking, of analyzing, and the ability to deal with a lot of often disjointed data in a quick and an effective manner. We soon learned to listen to each other. Early on when a student was so eager to present his own solution to the case being analyzed, the instructor might stop that presentation, turn to the intruder and ask, "What do you think of the arguments just being made?" The first time this happened, the student's eyes widened, his face reddened, and he dropped his head, for he hadn't been listening! Before long we learned that the case method did not rest on a series of disjointed ideas. Rather, effective development of the class discussions depended on building on what others had said and a gradual development of ideas. Refinements flowed from a student's opening presentation of the case, clarification of concepts and interpretation of relevant data, corrections as necessary, debate over alternative courses of action, and eventually agreement as to the probably impacts of the alternatives. Some best solution was seldom sought, just an appreciation of possible lines of action and their possible outcomes. Not that we often reached such an ideal endpoint after only ninety minutes, but by the time we left a class,

especially during the second year, we had begun to gain meaningful insight into the richness of the case under study.

Later, the first semester, I recall hearing two in my first-year class saying, "I was Phi Beta Kappa in under graduate school. Yet, here, I can't seem to get anything above a Pass." His companion replied, "I was too. And I can't either!" HBS had abandoned the traditional system of letter grades for one of Unsatisfactory (shortened to Unsat), Low Pass, Pass, High Pass, and Distinction. The latter was reserved for what was practically an A+ and awarded, especially during the first year to only two or three percent of the grades for any one test and for the semester's course grade. I suspect the rationale for this alternative system was to expose the student body to a new set of standards. I don't think grades had started to escalate at this time, but I do know that several years later a grade point less than a B average at the graduate level was grounds for dismissal. By contrast, the middle grade of Pass (comparable to a C) was not disqualifying. I also suspect that the School felt that it was dealing with a lot of students who thought they were "hot shots." During the first semester, for instance, our class heard one of the younger students say, "After we graduate and become industry's leaders" So, to get through to these *young Turks*, the School must have felt it necessary to knock them down a bit before easing up in the second year. This they did that first year by piling on the work, holding down the grades, and subjecting us to fierce classroom competition.

The two-semester, first year course called Written Analysis of Cases, or simply WACs, was another way of causing some of us to squirm. Once a week on Thursday afternoon, we were assigned a case, which required analysis and a written report. We divided into groups of five or six. Typically, we read the case Thursday afternoon or evening, as well as preparing for the next day's classes. Mid-afternoon the next day each group would meet for a couple of hours to discuss the case. From then on, it was pure pressure. Each student did his own analysis then prepared a carefully-typed report that had to be inserted in a mailing slot at the School library before ten p.m. Saturday. Our analyses relied heavily on numerical calculations presented in several tables and graphs and supported by double-spaced text. Reviewed by graduate English majors from across campus, our reports were judged as much for clarity of presentation and

proper English usage as for the technical quality of our analysis. Consequently the majority of us burned much midnight oil Friday evening followed by the whole of Saturday producing a document that often ran to 20 pages. Students with undergraduate degrees in the Social Sciences usually found writing these reports relatively easy, while those of us from Engineering and the Physical Sciences had the advantage on the quantitative side. Even so, many of my papers came up short analytically, not to mention how they were written. Typical of the comments I received were "Unconvincing argument. You jumped too quickly to your conclusions." or, "Poor transition." I think the highest grade I got on any of these papers during the first year was a

Pass +. It wasn't until my second year that my papers came back free of major criticisms.

Partly to dissipate the pressure, one of the brighter students once mocked the system by dressing up in running tights, a cape, and a silver helmet adorned with the Wings of Mercury. Waiting until the last minute, those in on this farce lined up to watch the runner streak across campus amid flashing cameras to deposit his case in the slot just before the stroke of ten. Another story was told about how two students anxiously driving their cars to meet the deadline ran into each other at an intersection bordering the campus. Each jumped out of his car and, instead of looking at the damage, ran to deposit his case before returning to their vehicles to assess the damage.

I have my own story in this regard. Although I could type, Vicky was a better typist. So, as I finished the drafts of the text, tables, and figures, she would began typing the report. I would do a final review and make a few corrections, which she would then retype. We did this right up to the last moment. We were following this routine one Saturday evening when Vicky went into labor. This did not surprise us since she was into her ninth month and overdue. But this was our second child and her experience with our first child, Becky, led her to believe there was no hurry. Thinking we had plenty of time to get to the hospital in downtown Boston some 20 minutes beyond the Business School. By 8:00 p.m. with the WAC deadline approaching her contractions became more frequent. Soon they were five minutes apart. Can you hold out a bit

longer"? I asked. "I'm still not through with my draft." So we kept at it. We finished around 9:30, just enough time for me to get to the School. Rather than loading her into the car (Mrs. Martelli, downstairs was looking after Becky), I delivered my report with some ten minutes to spare. I then returned, climbed the three floors to our apartment, helped Vicky down the steps and into our car, and drove directly to the Boston Lying In Hospital. When we arrived around 11:00, I was brought up short when the nurses wheeled Vicky directly into the delivery room. But I need not have worried. Tim would not be born for six more hours. Vicky gave birth to a healthy 9 ½ pound boy and I had survived another WAC experience.

Through pure grit and determination, we made it through the first academic year. I say we because getting through the year was as much of a test of endurance for Vicky as it was for me. She was cooped up in our third-floor apartment with two very small children with scarcely a night out, while I worked night and day seven days a week, except for a rare outing. All my grades were Pass, except for a High Pass for the single semester BRAS course. Not a particularly good outcome, but good enough to put me among the middle of my 617 classmates. Most of us were happy enough simply to know we would be around next year.

The summer vacation between the two years was a definite relief. We spent the three months in St Petersburg, Florida close to my parents where I earned a modest salary drawing construction plans for pre-fabricated steel buildings—a job my father had landed for me. It was relatively easy for me, since it required little more than what I had done as a *detailer* in San Francisco. The summer was a hot and sweaty one for Vicky, Becky, and Tim because our motel room lacked air conditioning.

The School imposed few course restrictions for the second year. The idea being that, having been exposed to the fundamentals the first year, second-year students ought to be free to take courses supporting the areas they hoped to pursue after graduation. I chose Administration and Review of Accounts, Advanced Production Problems, Business History, Business Policy, Human Relations, International Economic Relations, Management of Financial Institutions, and

Legal Problems of Doing Business Abroad. This last course was taught across the river at the Harvard Law School.

Student contacts with their professors were limited, at least for me. This could have been due to their belief that we were mature by now and could fend for ourselves. With my budding interest in international economics, I chose Lincoln Gordon, Professor of International Economic Relations, as my advisor. My choice could have been better. While he received me a couple of times to listen to my questions about course selection and my career aspirations, he looked preoccupied most of the time. Still, it was through his advice that during our summer break I read both Paul Samuelson's classic, *Economics: An Introductory Analysis* and Thomas Schilling's *International Economics*, both in preparation for the second-year series on International Economics. Later, I learned that he had become the U.S. Ambassador to Brazil and then President of Johns Hopkins University!

In sharp contrast was my experience with David E. Bell, of Harvard's School of Public Administration. Having worked with Ford International, he came to HBS to tell us about the opportunities that Ford had to offer for those interested in an international career. I especially remember hearing him talk about the "international man." This was someone whose domain was the world, who could work in Sweden, Germany, the Far East, or elsewhere. How great it was to hear someone describe such exciting career opportunities. The next week, without thinking twice, I called his number, got in touch with him directly, and arranged a meeting in his office across the river on the main Harvard campus. Once there I told him of my long-held interest in international affairs, my experiences in Venezuela, and my career aspirations. Little did I realize the stature of the man who spent nearly an hour with me, for he showed no evidence of wanting to hurry me out the door. In fact, he arranged for me to meet the *Administrator* of the US Agency for International Development (that's the head guy) in Washington, D.C. and two from Stanford Research Institute (SRI). Subsequently, he became John F. Kennedy's first Budget Director and later a Vice President of the Ford Foundation.

¹ I was to learn later that his father had taught at Stanford, thus knowing SRI.

Another guest speaker was Robert McNamara, who at the time was among the gang hailed as industry's *whiz kids* because of the mathematical sophistication they brought to business decisions. Rather humble in his presentation, MacNamara told how it was possible to make *big* mistakes in industry and still survive. His example was how he had backed production of Ford's Easel, which was to become a colossal flop. As is well known, McNamara later became the controversial Secretary of Defense during the Viet Nam war.

Besides the above, I was fortunate to be exposed to two other academics of note. This resulted from the course I took at the Law School. Just the idea of taking a course there excited me. I recall walking past caricatures of early American and English barristers lining our classroom. Out of a class of 200, I was the lone Business School student. Our assignments focused mostly on the review of civil cases, in much the same manner as at HBS. The professor would take his place behind the lectern and say, for example, "Mr. Jones lets have your brief on this case." Then after having done so, the prof would say to the same person, "Now give me your rebuttal to what you have just said." As I must have already known, lawyering involves both defending and challenging various positions. No great revelation, here, but at the time, it opened my mind to the need for mental agility. This was quite in contrast to how I had learned to study and think in engineering school, where *correct* solutions flowed from standard formulae based on scientific principles and experimental results.

I sweated through these classes hoping I would not be called upon to present or defend a case, and I was not. The profs must have known that I would have trouble pulling that off. The only time I did comment in class came when the prof asked, "What difference does it make whether the client pays up front or at the end of the trial? Aside from the risk of his not paying, it's the same amount, isn't it?" The class, being law students not business types, wasn't grasping the significance. So, I raised my hand, the prof who knew where I sat, motioned for me to speak up. I described the concept of the "time-value-of money." I was not left off the hook, however, when it came to tests and team-based homework.

The two teaching the course were Kingman Brewster, who eventually became Ambassador to England and later Yale's President, and Steven Surrey, who drafted President Kennedy's tax initiative. One day, I had occasion to go to Prof. Brewster's office. It was a comfortable shambles, books and papers piled up high and students lounging in chairs discussing some law topic, Brewster being among them.

On one occasion our instructor in Business Policy lit into a student who had proposed "firing the manager." The instructor said something to the effect, "Harvard doesn't teach you to solve problems by getting rid of people. We teach you to work within the limits of the staff you have. Only under extreme conditions, and then after careful exploration of the alternatives, are you justified in sacking someone." Turning red, the student closed his notebook and ceased talking. The class was momentarily stunned, since none of our instructors had voiced such strong words before, nor since. It's just possible that the faculty had sensed that we students were beginning to go down the wrong path in our thoughts about personnel management.

At long last I began to loosen up with graduation just around the corner. On a couple of weekends Vicky and I began exploring some of the historical sites near us, Lexington and Concord being among them. We managed an overnight trip to the White Mountains of New Hampshire where Vicky and I spent the day skiing. We found the *corn snow* that the locals bragged so much about disappointing, given our prior exposure to winter skiing in Canada. Even just driving downstream along the Charles past the Massachusetts Institute of Technology or wandering around Harvard Square and the main campus was inspiring, or walking past an historical marker that read "This was the home of William Wadsworth Longfellow." The area was awash in history.

Interspersed during these last few months were an occasional evening dining at a well-known Boston fish house, seeing the Old Vic Players, and attending Arthur Fiedler's Night at the Pops. I had thought that the Pops referred to popular music. Instead, it meant the

popping of champaign corks by those sitting at tables of eight in the large ballroom in front of the stage where the orchestra played. Another memorable event was attending a rally for Fidel Castro at Soldiers' Field, across from HBS. At the time we cheered him as a conquering hero after his defeat of Fulgencio Batista. The stories of his gallant fight in the Sierra Maestra excited us all. What a disappointment he turned out to be.

This second semester, I received a single Pass in Management of Financial Institutions, a single-semester course where I was a novice compared with most of my classmates, a distinction for the two semesters of Business Policy, a B at the Law School, and all the rest High Passes. This result was a full grade higher than my first year. I don't know if I somehow caught on to the case method, or the School eased up in its grading. Probably some of both. In any case, comparing grades with my friends, I believe I moved well up into the upper third of my class. Good enough to qualify for most positions, but short of jobs with classy consulting firms, such as McKinsey or Booz-Hamilton, or the top banking firms on Wall Street. Given the opportunity, I might have enjoyed consulting, but not Wall Street banking.

I never figured out how I managed the distinction in Business Policy, but I do remember the Advanced Production Problems course taught by Prof. Bright. Not only was this a demanding course, but Prof. Bright made it tougher than most instructors. He treated the course as though this were the only meaningful course we were taking that semester. Students with engineering background, however, had a somewhat easier time of it. After our group made its formal presentation of a case, Prof. Bright said that my presentation had surprised him, saying something about my command of the facts. Later, as graduation neared and we were interviewing for jobs, he suggested that, with his contacts at General Motors, he could help me get a junior management position there. I thanked him, but said I aspired to another line of work.

Besides being exposed to these accomplished persons, I was to rub shoulders with some outstanding classmates who eventually became famous in their own right. For example, James

Wolfensohn became President of the World Bank; Rod Carnegie, who graduated first of the class, became chairman of several Australian companies, and is now Sir Roderick; Peter Brooke became a Member of Parliament, was both Chairman of England's Conservative Party and Secretary of State for Northern Ireland; and John McArthur was to become Dean of the Business School. (Both Carnegie and Brooke had graduated from Oxford before coming to the Business School, so they had a head start on most of us.) This says nothing about the many who rose to the rank of Chief Executive or Financial Officers and Chairmans of the Board. Of course, not all reached such heights; but, of those who graduated, nearly all profited by the experience. I know of no other academic institution, save the Military Academies, whose alumni keep in such close contact as does those of HBS. The School facilitates these contacts through periodic reunions and a quarterly magazine in which each class has its own recorder. John Ryan has been the recorder for our class of '59 for as long as I can remember, maybe starting right after graduation.

In 1999 Vicky and I attended the fortieth reunion where we reestablished some old friendships, as well as participated in an inspiring two-day program about relevant business issues. Dean MacArthur gave one of the presentations and talked about the need for integrity in business. How appropriate, given the subsequent scandals that have swept over Wall Street and elsewhere. Strolling across campus, looking in at the library where I had spent so much time studying, and stopping at the campus book store flooded my mind with memories. I found it hard to believe I had ever been to such a prestigious institution. So, imagine my surprise when I registered for the reunion to be told that I was on the program. "That can't be. There must be some mistake," I argued. The receptionist checked the schedule and said, "There's no doubt but that you're on the program." "But how can that be? I know nothing about this. And why?" I said. It turns out that one of the organizing profs had written to me at the last minute—a letter that had arrived after Vicky and I had left Ft Collins. It seems that the description of my overseas consulting since retirement, as well as being *professor emeritus*, might be inspirational for some of my classmates who were about to retire. (I had written about such things as part of the writeup each of us was asked to do as part of the reunion.) For that night and the next, I

scrambled to put together a ten minute talk about what I had been doing since retirement. The other classmate asked to talk about his experiences as an adjunct professor at the University of Chicago. So, perhaps it was an academic thing. I talked about wanting to join the World Bank and, though having three opportunities, was never able to pull it off. So, at the end of the presentations that day, when Jim Wolfensohn came up to me, I said, "I know who you are." And he said, "Now, I know who you are." Just a short, sweet moment of notoriety.

I never doubted the value of the education I was getting, neither while it was occurring, nor afterwards. It was just one long, hard slog for the two of us. I've heard of wives working to help put their husbands through graduate school only to have the husbands, once established in their professions, divorce their spouses in favor of someone much younger. What a bummer! As Connie, our daughter's mother-in-law would say, "Those are grounds for *murder*."

Afterward Going back over what I have just written has given me second thoughts. First, the name dropping. In my defense, I was simply awed (and still am) by my exposure to such notables. Yet, having seen them, and interacted with them in some cases, conveys little if anything about who *I am*. Perhaps, I was like the Iowan in New York City for the first time who gazes up at the skyscrapers with gaping mouth. The experience was exceptional. Second, I made a lot about how hard I studied. I did work hard. Probably more than most. I think some in our class found HBS a breeze, although no one ever told me that. I do recall some of my classmates who were single talking about having a beer or two at some pub, even during weekdays. I worked as hard as I did because I wasn't sure I would make it. At 31 with a wife and two young children I felt my family responsibilities, and, frankly, I have scarcely ever found major challenges such as this easy.

Job Search

I didn't bother interviewing those who came to the Business School, since I wasn't looking for the jobs they had to offer. Although, I might have considered working for a top-notch consulting firm, simply for the experience. But, I had neither the background nor the

class standing. I think such firms limited their choices to the top ten or twenty in our class, or those with strong financial backgrounds. With the pass I received in the finance class during the second year, I didn't have a chance. Earlier, I had filled out a questionnaire concerning my job interests and learned that I was an outlier. Most came to the Business School interested in finance or in starting a business.

Earlier, I had thought about working in the Planning Division of Standard Oil of New Jersey, headquartered in New York City. That would have fit with my interest in economic planning, but not my nascent interest in economic development. But I struck out on that possibility when the NY office came back saying that they had no openings, although Creole would welcome me back. At one time, that might have appealed to me. Vicky was certainly willing to return there, but now I wanted to move in another direction. Prior to leaving Venezuela, I had told Vicky that I didn't get excited over helping a company make money. I had more lofty goals, which suggested working for the World Bank, the United Nations, or USAID. Looking back now, I wonder how I could have considered working in New York City for any length of time. I know I soon grew tired of living in San Francisco, even as attractive as that city was.

So, I visited World Bank headquarters in Washington, D.C. Those I met there treated me respectfully, but said I was too young. "Come back when you have some gray hair" explaining that Bank staff typically deal with senior-level officials in their own countries and that they prefer dealing with Bank staff who are not "youngsters," regardless of how bright they might be or how impressive their education. I mentioned that I might work for SRI, which they thought would be good preparation for a position with the Bank.

The meeting I had had with David Bell led to a meeting with USAID in Washington,
D.C.. Without recognizing its significance, I was ushered into the office of the *Administrator*,
the head of the whole organization and a position appointed by the President of the United
States! I recall the deference I received as I checked in with his secretary. Once inside I found

myself in an enormous office with a huge desk, a fireplace off to one side, costly chairs, and a couple of sofas with coffee tables in front, and with tapestries and pictures of dignitaries on the walls. Certainly not an office of an ordinary government official. I wasn't dismayed, but I should have been. I confidently told of my work in Venezuela, how I had visited the Point Four office in Costa Rica, and, now with my MBA, I would like to move into the field of international development. He listened courteously with a pleasant smile on his face, but was noncommital. I soon found myself being led down a long, hallway to the rather drab office of the chief personnel officer. I repeated my story to him, including my interest in helping those in the developing countries. He too listened sympathetically but without much enthusiasm. Once I was out of the Administrator's office I no longer enjoyed any special status. After exploring alternatives, none of which were particularly encouraging, I asked for the name of someone as a follow-up to our discussion where upon he called in his secretary. He asked her for the extension number of the person I should contact. After what seemed like a long time, he called her back to his office asking why the delay. She said she had been looking for his number but couldn't find it. Raising his voice, he said, "Good grief, gal! He's just a few doors down the hall. Why don't you go there and ask him?"

The drabness of the offices and the lethargy of the staff nearly convince me that working for a large bureaucracy was not for me. Strangely enough, I didn't get this feeling at the World Bank, although it too is a large bureaucracy. After a few weeks without a response from AID, I called asking why I hadn't heard from them. The personnel officer said, "Oh, we didn't bother following up on your interview because we couldn't match your \$17,000 salary at Creole." I guess he didn't buy my statement that I was willing to work for less in exchange for a position I might find more rewarding. Just as well, since my subsequent exposure to AID overseas had not always been positive. Although, given the right circumstances, I might have enjoyed working for AID.

Besides AID, David Bell had also put me in touch with two from SRI, an organization loosely affiliated with Stanford University. The two were Eugene Staley, whose book on the

Future of the Less Developed Countries I had read as part of a second-year course on Economic History at Harvard, and Ed Prentice, Head of SRI's International Programs. Not only was the subject of Staley's book right-on, but by being funded by the Rockefeller Foundation and guided by a group of impressive advisors, including Nelson Rockefeller, it heightened the author's status. Besides his general interest in development, Staley had written extensively about small-scale industry in India. I was thrilled to suddenly find myself talking with someone whose general expertise was in a field I wanted to pursue. We met in their hotel room just off Harvard Square. Prentice looked about fifty with a mature body and dark hair full at the sides, nattily dressed, smooth talking, debonaire, who looked the part of a top executive. In contrast, Staley looked like an academic: quiet, intense, with piercing eyes, didn't say much, but was not threatening. The interview came off well. However, they told me that I would have to work in the USA long enough for them to appraise my abilities and for me to learn SRI's way of doing things before sending me overseas. With a job offer immanent, I ceased my job search. Before long I received a job offer and prepared to drive to the Bay Area.

During the interview I learned that SRI was an applied research organization originally set up to promote the state's industrial and commercial development. Its professional staff of some 2,000 was well known not only in California but throughout the USA and abroad. I was to be assigned initially to a small group whose focus was Industrial and Energy Economics, where I ought to feel comfortable. Eventually, if all worked out well, I would receive international assignments. I could start work by mid-summer at an annual salary of \$6,500. I was happy with the deal. Not only did SRI and its line of work appeal to me, but I was delighted to return to California.

SRI

Our trip cross-country to the SRI headquarters in Menlo Park was uneventful, except for stopping in Iowa to show off Vicky, Becky, and Tim to my grandmother Shaner and my Uncle

Glen followed by a brief stay at Lake Tahoe. Once in Menlo Park, I unloaded the family at a motel and checked into SRI. The main office was a modern, two-story brick building located just north of the Sunset Magazine headquarters. The main office was in a residential area surrounded by single-story clapboard buildings of WW-II vintage and tall eucalyptus interspersed here and there. Once I had made my presence known, Vicky and I began searching for a place to rent. We soon found a nice two-bedroom bungalow in a clean, working-class neighborhood in Redwood City a few miles north of Menlo Park.

My new boss, Sherm Clark, met me with a strained look that caused his eyes to squint and send horizontal creases across his forehead. In time I learned that this was wasn't a reaction to me, just his normal expression—I also learned just how bright this introverted 40-year-old really was . . . and how generous. Once after three days on the stand as an expert witness in Los Angeles' City Hall concerning a public utility hearing I thought the lawyers on the opposing side had nailed him. When I told him as much he said, "They never touched me." Later, the judge was to say that Sherm's was the longest and most effective defense of a position over which he had ever presided. After I had worked with the group for some time, Sherm would get after me for the meager expenses I submitted for reimbursement. He said I undercut the rest of the group, especially himself, who figured that an ample expense account compensated for the long, hard hours he expected us all to put in.

Besides Sherm, our group consisted of seven others. They were aggressive, self-confident guys as competent as my Harvard classmates. One had his PhD, another would soon have his, and the rest had master's, including Dick Spray, who had graduated from HBS several years previously. John Huneke, a handsome, viral romantic had graduated from Stanford's business school at about the same time as did Dick. Shortly after I arrived John invited me to go with him to the nearby pool to swim then lunch on cheese, French bread, and wine. Straight out of a Hemingway novel. Ted Haner, with his PhD was so confident of himself that he felt there was no subject he couldn't master on short notice. Once, when he flew back to Chicago to interview top management of a company that produced fasteners such as

screws, bolts, and nuts. Although Ted knew little about this topic, he waited until he was in-flight before reading the material the company had sent him earlier. He was just that self-assured.

Sherm knew his field so well and was so organized that he would send Paul Davis and Dick Spray off to collect the data he needed in his analysis. He would feed these data to one of SRI's technical staff who would then put them in graphic form. From there Sherm would apply his extensive knowledge of energy, be it natural gas, petroleum, or electricity, to forecast future supply and demand according to various assumptions about the future. Then *on a weekend* he would call in his personal secretary and *dictate* his report, which could run to 50 pages. While doing this, he would have one of SRI's skilled editors work with him to put this raw material into suitable form. By the end of the weekend he would review the draft, make a few changes in collaboration with the editor, and *have the report ready for publication* first thing Monday morning. I doubt *anyone* could match Sherm's ability in this regard. I know I certainly couldn't.

By contrast, I got off to a very rocky start with my first SRI report, despite the progress I had made in writing my WAC papers during my second year at HBS. Sherm had arranged for John to guide me on a study of the Northern California market for perlite, a volcanic ash of sufficient strength that it can be used as the prime aggregate in light-weight concrete. After meeting with our client to gain their insight, I began interviewing potential users, considered the competition, and came up with a marketing strategy–all in rough form–and gave this to John. After a quick review, he told me to turn the report over to Chris Tapley, a good editor with long-time service at SRI. I think John, who held Sherm in high esteem, was trying to emulate the efficient way Sherm turned out reports. It might have worked had I been able to convey my results in tables and graphs the way Sherm was able to do. But that was beyond me at that time. The next day, to my chagrin, Chris brought my draft untouched and tossed it on Sherm's desk saying, "Here, I can't do anything with it!" After the shock, I regrouped and eventually produced an acceptable report. Until then I thought my future with SRI could be short-lived.

But not so. I stayed on for a total of ten years. However, from then on I was careful *not to* show anyone any of my first drafts.

I won't forget my shock when Ed Robinson, head of the Institute's Economic Division, told us in one of our periodic training sessions that the written report was SRI's product. Having him say "After all, we all are writers" gave me a start. To this point, I still thought of myself as an engineer, albeit with some exposure to management concepts, not a writer. Despite the progress I had made in writing WACs at Harvard setting down my ideas after data collection hadn't been easy. Once while at Creole's Tech Agency, I had said, "I know what I want to say, I just can't get the words out." More likely, I didn't know what I wanted to say!

Our studies were eclectic, influenced by those who knew SRI firsthand, or about its reputation. During my time there, we always seemed to have work coming our way. Often our studies dealt with some combination of engineering, business, and economics in the fields of energy, materials, or marketing. Besides the studies of perlite and energy already mentioned I sometimes did the study by myself, as with investment opportunities for developing bay-front properties south of Oakland, the northern market for California minerals, and the market for reinforced concrete pipe in the deep South; in collaboration with Bill Sharpe, as in the market for imported steel in the San Francisco Bay area, and in collaboration with Sandy Thayer on the potential impact of a nuclear attack on the natural gas and petroleum pipeline network throughout the USA; as a member of a three-man team as the market for cement in Hawaii and Alaska, and the marketing of petroleum products in Spain; and as a member of a large team, as with a large group that compared the economics of asphaltic and concrete highways of the national interstate system; and at other times I was off gathering data for one of Sherm's energy studies.

Our approach to the marketing studies typically began by understanding the product followed by methodically beating the bushes to "build up" both the number of suppliers, their output, and competitive advantage, the number of buyers with the size of their demand, and estimates of market share under various assumptions. Those of us doing these studies seldom

relied on formal questionnaires, but instead adjusted our questions as our investigation progressed. In time, after we encountered similar responses a number of times, we would feel reasonably confident that our information was in the ball park and we could move on to another set of questions. Even so, it was prudent to search for published data to the extent they were available. Often, they were not. Failure to do so got me into trouble on the Kaiser cement study. In estimating the demand for cement in Alaska, I had interviewed the major cement users, such as concrete mixing plants and major civil-works contractors there. What I had overlooked was published data by the US Corps of Engineers on shipments from West Coast ports to Alaska. The error was not serious, but it undermined the credibility of our study, which didn't enhance my reputation with SRI at the time. SRI got this project when a competitor to the Kaiser group thought it had the only limestone deposits in the Hawaiian Islands, which would threaten Kaiser's cement shipments from the West Coast. Turns out that Kaiser found other deposits on the Islands and the venture fell through. Being the lowest ranking of a three-man team, I was sent to gather data on cement supply and demand in Anchorage and Fairbanks in mid-winter, whereas another member studied the market in Guam, and the team leader did the same in Hawaii. Go figure!

The following three studies are larger and more significant than the above, and occurred after I had gained more experience with SRI. They deal with the impact of a hypothetical nuclear attack on the USA, a comparison of two methods of highway construction, and the market for concrete pipe in the Deep South.

At the time of the hypothetical nuclear attack study the Cold War was in full swing and fear of a massive nuclear attack on the United State was considered possible. Teachers instructed children to hide under their desks in case of an attack; and families were advised to build a bomb shelter for protection and to store food and water. Being an opportunist Rogers Cannel of SRI garnered considerable funds for studies related to our country's civil defense. Sharing the same office Sandy Thayer and I used maps of natural gas and petroleum pipelines across the USA, studied reports of the damage caused by hypothetical nuclear tests in the USA,

and bomb locations of a hypothetical Russian attacks. Synthesizing this information we estimated the extent of the damage. To our surprise, the outcome showed only minor amounts of physical damage to the country's network of pipelines, partly because the lines were often underground and the extent of the bomb damage limited. Moreover, we found that human casualties might be considerably less than popularly thought, since by knowing the down-wind, cone-shaped pattern of fallout and with ample warning, large populations could move out of contaminated areas, or though them, without being exposed to excessive amounts of radiation. What was subsequently brought to our attention was our failure to consider the possible damage from firestorms. (There always seemed to be something to compromise the results of our studies.)

The study of asphalt vs concrete highway construction took me to various places in the East, including Harrisburg, Pennsylvania where I interviewed an official of the Pennsylvania Turnpike Commission named Schultz During our conversation, his phone rang. Pardoning himself he turned his attention to the caller. His discussion went something like this. "Yes, George used to work here. No, we didn't let him go. He left on his on accord. His work was fine." After some time, Schultz finally said, "I guess you'd say he had those typical German characteristics." Followed quickly by, "No, no, no! He was hard working, dependable, methodical." And so forth. I couldn't hear what the called had said, but I assumed he said something like, stubborn, slow, and unimaginative. Earlier, I had explained that some of my forefathers were Pennsylvania Dutch and that the name Shaner had been Anglicized from Schoëner. So, Mr. Schultz must have felt comfortable speaking favorably in front of me about those with German ancestry.

My assignment in the Deep South took me to Louisiana and Mississippi. Some of those I met while gathering information on the nature and size of demand for reinforced concrete pipe viewed me with suspicion because I was acting on behalf of Lock Joint Pipe, a *Yankee* firm whose headquarters we in East Orange, New Jersey. The Civil War, long past, still showed through, even though I came from California. The typist who translated the notes I had dictated

on tape said she found my accent strange, thinking I must be English. Much of the market for the pipe under study was for municipal drainage systems and highway culverts. I had no problem gathering estimates of past and future demand for pipe from the municipalities. But data on the demand for highway culverts, which came from the State Highway Authority, was a different matter. In searching this source, I was told that I must talk with the Chairman of the Highway Commission himself. Because the Commission met only periodically, I was referred to the Chairman's private office on the outskirts of Baton Rouge. He turned out to be president of the State's largest manufacturer of reinforced concrete pipe of the sort specified by the Commission as suitable for highway use! So, the person responsible for deciding on the purchases of pipe was the same one producing the pipe. Sure looked questionable to me. When I explained the nature of our study to him, he looked at me guizzically and asked, "What does this study mean to you? What do you get out of it?" It sounded as though he were probing to see if I could be bought, should he conclude that the results of our study would threaten his business. I said simply that SRI did this sort of work throughout the USA, even abroad, and that this was just another one of my assignments. I then asked for his estimate of past and future demand for concrete pipe and who the main suppliers were. He grinned and said, "I can't give you that information." I responded saying, "Not even in your position as Chairman of the Commission?" "No," he said, to which I replied, "Okay, I'll get the information elsewhere." He answered, "You just do that." He might as well have said, "Sonny." I was able to come up with the figures I needed, but it took considerably more effort, and my estimates were less certain, than if he had given me the information outrightly. But then, why should he?

The foregoing studies were demanding both in terms of long hours at the office, including evenings and weekends, and the uncertainty entailed in not knowing if I were on the right track. I ended up working nearly as hard as I had at Harvard. Part of the problem rested with the diversity of my assignments. For those who had developed an expertise in a particular field and had established reliable data sources as had Sherm in the energy field or Rogers Cannel in Civil

Defense, their work was more routine and certain. They knew their data sources and could test their ideas with other professionals.

While I found my associates professional and my assignments challenging, I also found the SRI environment cold and aloof. Walking down the long hallways one would seldom see an open door; or groups simply passing the time of day. Only once did Sherm invite a small group of us into his home, and that was long after I had joined his group. Huneke once had two of us over to his home in the up-scale Portola Valley, but that was a work-related session. These were first impressions, which contrasted strongly with Creole, where life was similar to that of a small Midwestern community. In time, I grew accustomed to the solitary nature of our work. In fact, I found it necessary in coping with the rigors of research and report writing.

During the summer of our second year in California we bought a lovely single-story, three bedroom house with two-baths in Los Altos eight miles south of the office, located on a cul-de-sac in what was formerly an apricot orchard. It cost \$27,000 in which \$9,000 was our down payment and the rest was covered by a 30-year mortgage. We were able to make the down payment from our Creole savings, and we still had money left over. Creole had gotten us off to a good start financially.

Eventually, Vicky and I began making friends with some of the SRI staff, as well as with those in our neighborhood. Sandy and his wife, Nona, invited us to their home, a spacious, two-story house on a large plot of land, in the wealthy Woodside community. Somehow they had paid only a modest price for the house, which was typical of the many good deals the Thayers were able to pull off then and later. Once during a weekend party Sandy displayed the wine he had made from a press in their back yard using locally grown Zinfandel grapes. We got to know Harry Robinson because of our mutual interest in international affairs. This 55 year-old bachelor had considerable experience in South Korea, India, and elsewhere in Southeast Asia and the Far East. His collection of Asian art was impressive. Harry told of being exposed to a mystic in India who said he knew about Harry's past, how old he was, some of the experiences

important to him, and other personal matters. Harry, an important member of SRI's International Programs group was an analytical and reasoned thinker. Yet he was troubled by what the "seer" was able to tell him. He even hinted at believing in the seer's mystical powers—something I found difficult to believe His home was in the rich, rural area of Woodside on a large acreage overlooking the mountainous skyline as well as the home of "Tennessee" Ernie Ford. Carl Trexel, a chemical engineer whose office was just down the hall from Sandy's and mine, and I occasionally played golf with Dick Spray at the Stanford course where we all were members as a result of our working for SRI. Dick became so enamored with golf that he eventually left SRI to work full time with the well-known golf course designer, Robert Trent Jones. During this time, a small group would gather in one of our offices during the noon hour to play bridge. While invited to join them, I preferred watching over their shoulders.

Once a week for a couple of months I attended evening sessions headed by Eugene Staley and Dick Moris. They were interested in staff reactions to a book they were writing on small-scale industry on the Asian sub-continent. SRI also hosted a series of lunches featuring noted guest speakers. One of them was C. Northcote Parkinson, a popular author of the time. He had become well-known for his Parkinson's Law, i.e., "work expands to fill the time available for its completion." Walking out of one of these luncheons, I approached Bill Bredo who had taken over from ED Prentice as head of International Programs, and asked if my MBA together with my overseas experience with Creole were enough to pursue an international career with SRI. His reply, "It's good enough if you simply want to stand on street corners in these countries and hand out cartons of milk!" 'Nough said." But as experienced as some SRI staff were in the international field, many were still learning on the job. For instance, I recall one staff member describing a presentation he had made to a group in New Delhi and became worried when he saw several in the group wagged their heads from side to side. It wasn't until later that he realized, that this was the way Indians express their *approval* of what was being said, *not disapproval*.

In the midst of all this, our third child, Mike was born at what had become known as the "Stanford Hilton," adjacent to the campus. The hospital got its name because of the luxuriousness of the building, its modern equipment, and the beautiful setting. While waiting outside the delivery room I recall boning up on my next assignment concerning the California market for industrial minerals. Even before Mike was born, Vicky's life was constrained by having to care for our two young children, my frequent absence in the evenings and weekends, and lacking transportation because we were a one-car family.

Hank Riggs joined our group in the fall of 1961. He was a dark-haired, nice looking guy with a cast in one eye so you were never quite sure whether or not he was looking at you. What I remember most about Hank was that he *never* talked about his academic accomplishments or how smart he was, even though he was a Baker Scholar. Instead, he sometimes would reveal his frustration with others. This showed up when the two of us went to San Francisco to collect data from Southern Pacific RR. After we had left their offices he simply said that he thought our contacts there didn't know much! While still working at SRI, he audited a few courses at Stanford. Something to do with finance, I think. He became an adjunct professor there before eventually he becoming President of Harvey Mudd College and then Vice President for Development at Stanford.

With Bill Bredo's response ringing in my ears, I began exploring the possibility of returning to school for a PhD. This possibility was made easier because of SRI's Accelerated PhD Program that allowed a staff member to work half-time and attend classes at Stanford the other half. Sandy Thayer had told me about a new program there that might interest me called Engineering-Economic Planning funded by the Ford Foundation and administered by the Civil Engineering Dept. The program's intent was to improve decision making as concerns investment and operation of major water resource, transportation, and power facilities. The idea was to broaden the perspectives of senior engineers by exposing them to systems analysis, economics, and political science. I qualified as a senior civil engineer and my interests were already tending toward an interdisciplinary perspective. I thought the advanced degree plus expertise in

economics, especially, ought to qualify me for international assignments with SRI. When I informed Bredo of my intent, he concurred. By this time Sandy was about to complete his PhD in Industrial Engineering at Stanford and was teaching part time there. So in the autumn of 1962, just as I was starting to get the hang of it with Sherm's group, I embarked on a new venture.

PhD

Within the Engineering-Economic Systems program I chose a sub-program called Engineering-Economic Planning, which suited my interests. It would give me considerable flexibility in selecting the two years of courses required for the PhD and provide the background for a dissertation focused on the so-called less developing countries. Being enrolled in the Civil Engineering Department made me feel comfortable, given my undergraduate degree and professional experience. I had toyed with the idea of pursuing a PhD in economics. This would probably have been a better career move, certainly more rigorous undertaking. But the change in career direction would have been abrupt and would have exposed me to professionals whose professional and personal habits were considerably different from those I had grown accustomed to in the engineering field; although, Harvard and SRI had begun to broaden my exposure to other professions. Besides, I was 35 with a wife and three children to look after, which kept me from gambling too much.

My application to candidacy was straightforward with no hitches, made easy by Stanford's agreement to selectively admit SRI staff to its PhD programs. Apparently, my status as an SRI employee carried some weight, as did my MBA from Harvard; and because those running the newly formed EES program were probably looking for qualified candidates. Along with my admission came an annually renewable Ford Foundation Grant, which came in handy. By this time, much of our Creole savings had been pretty well used up. Along with the grant was the opportunity for a *forgivable loan* provided I agreed to accept a university teaching position upon graduation. I declined this opportunity out of hand because I wished to pursue a career overseas.

Because of my MBA degree from Harvard, the Department assigned Vincent Roggeveen as my graduate advisor. He had received his doctorate in Business Administration from there. Sandy had warned me that Vince was not the easiest guy to work for and liked to tell the story about an advisee who took a special studies course from him. Rather than grade one of his student's papers, Vince returned it to him saying he didn't understand his reasoning and told him redo it. After considerable effort the student resubmitted the paper to Roggeveen, who then said, "Ah, yes, now I see what you are saying." Then proceeded to reject the paper in its entirety. But the two of us seemed to hit it off reasonably well and I didn't feel confident enough to request another advisor.

With funding from the Ford Foundation, and with SRI's approval, I decided to work full time on my PhD. Sherm acquiesced to my departure, but promised me occasional work should the timing be right. However, he thought I was making a mistake. To his way of thinking, the advanced degree was of little benefit. He hadn't needed a PhD to accomplish his professional objectives. Moreover, he told me I would never recover financially from the time taken off from work. But, my job objectives were quite different from his. He already had the background to pursue his chosen field. Whereas, the international career I wished to pursue would not be open to me otherwise, or so Bredo said.

An advantage of the EES program was that it allowed me to craft my course work to fit my interests in economic development, while taking Bredo's advice that the future in economic development rested with systems analysis and mathematical programming. Consequently, I chose a combination of courses in economics, mathematics, and systems in addition to the several courses required by the EES program. Strangely, even though I was enrolled in the Civil Engineering Department, I took only *one* traditional engineering course. That was Transportation Planning, a course taught by Roggeveen. The program would occupy two academic years followed by what I hoped would be a year to finish my dissertation.

I found working on my doctorate at Stanford was much less demanding than my experience at Harvard. Entering Stanford after having completed my MBA plus three years of applied research and report writing for SRI left me more confident than when I entered Harvard. This feeling was buttressed by my advisor, Vince Roggeveen, was only a few years older than I had for some time been hoping that SRI would take him on as an occasional consultant. But as chummy as he was, Roggeveen nearly did me under by thinking I was better than I was. He advised me to take an honors course in the theory of probability, which called for a sophistication in math far beyond my ability.

Those of us in the EES program were obligated to take several courses that formed the core of the program. These were a graduate version of Engineering Economy, Economics of Public Works, and seminars on water resources, linear programming, and the dissertation.

Although not required, I also took EES courses in Cost Allocation, Municipal Finance, Water Rights Law, and the EES seminar on Economic Problems of Emerging Countries taught by SRI staffer John Royce. I took the Economic Development Planning course taught by visiting Dutchman, Gerard Boon who was from the University of Rotterdam. I had no particular problem with the EES courses, since our instructors geared them to *mature* students such as ourselves who had been out of academia for some time. Engineering Economic stood on its own; but since the Industrial Engineering Department, where the course was taught, collaborated with the Civil Engineering Department in support of the EES program, grading was easier.

But the foregoing leniency did not carry over to the other courses I took, where I sometimes competed with PhD candidates in Economics and other graduate programs. Price and Allocation Theory and Economic Development, both qualified as two of the four subject areas required for a PhD in Economics. So, on that count I was half-way there should I have wanted to pursue a PhD in Economics, instead of the EES program I was in. The Elementary French course that I took was designed to meet one of two language requirements. Undergraduate courses that I took were macroeconomics that focused on national income and employment, Theory of Probability, Statistical Methods in Engineering, Linear Algebra and Matrix Theory,

Introductions to Operations Research, Calculus, Use of Automatic Digital Computers, and Public Administration.

The economics courses gave me considerable worry, but, in the end, little grief. The worry came both from having far less background in economics than did my classmates and from the massive reading assignments. Being suited to engineering I read as a plodder, rather than a skimmer who could quickly grasp the essence of a topic, as many in the social sciences were able to do. Even so, I did well enough to earn As and Bs, which helped me maintain a satisfactory grade point average. Somewhere along the line, I learned to select a sampling of the required reading as a means of covering the essential elements of these economics courses. And about the time that this happened, I realized that my idea of returning to graduate school so that I could gain mastery over the subjects of my choice was unrealistic. As I probed ever more deeply into my course work, I only succeeded in broadening my vista. I was becoming better educated by knowing *more* topics, rather than learning *more about* a particular topic.

The most worrisome among the economics courses was an introduction to *macroeconomics* taught mathematically. When I went to the professor scheduled to teach the course, he asked, "How good is your math?" I said that I got As and Bs to which he replied, "I didn't ask you for your grades. I asked how *good* you were in math." In time I grew to understand what he meant. Although I felt comfortable with the math courses I had taken, I was *not good* in math–not to the extent required to excel as a mathematical economist, or any other discipline requiring mathematical modeling. I ended up taking the course anyway and thought I had flunked the final. I came home and threw my shoe into our closest leaving a large print of the sole. Just after Vicky had painted it! What a surprise when I found I found my course grade was an A! Just went to show that it was possible to get a top grade and not really understand the subject. Perhaps grading at the undergraduate level was not as difficult as I have implied.

Alan Kneese, a visiting professor from Resources for the Future, a Washington, D.C. think tank, taught the EES course, Economics of Public Works. This was my first exposure to

economics at Stanford. I survived with a B+, but more importantly, the course exposed me to Steven Marglin, a young, rising star economist from Harvard whom Kneese brought in as a guest lecturer. This in turn led to the opportunity to listen to a debate between Marglin and Kenneth Arrow, a noble laureate of tremendous stature among economists. Although, we in the EES program valued the opportunity to listen to the debate much of what was said went over our heads.

The course that nearly scuttle me right off the bat was the Theory of Probability, a course I had no business taking because it was for *honors students* some of whom were math majors. Harvard and my engineering work notwithstanding, I had not been immersed in math since my junior year at Iowa State 13 years previously. But Roggeveen, not knowing my abilities thought I could handle it. The instructor's lectures were a loss to me. Although, I worked most of the assigned problems, sometimes just going through the motions, rather than knowing what I was doing. I recall even wondering about the meaning of an *infinite series*., although the concept doesn't baffle me now. Such series seemed completely new to me. Yet, when I went back to review my old calculus book, sure enough there were circles around some of the assigned homework problems that involved infinite series. Somehow I managed to get by until the final, which blew me away. My final grade was a D, which was a terrible way to start out. In checking around, I found out that Novakof, our instructor, was also an SRI employee whose office was close to mine. So, I went to see him. I told him that I realized I didn't know the subject well, that I was just returning to school, and that I had done all of the homework independently for which I had received passing grades. He was noncommital, but when my grade showed up on my transcript, he had changed it to C. Not good, but a grade that would not drag my average down so low as to jeopardize my continuation in school.

So, Roggeveen and I regrouped. We decided that I needed to refresh my math by taking the four-course freshman series in calculus—a subject in which I had done reasonably well at Iowa State. At that time some Stanford students had even taken Calculus in High School. I took the first of a four-part series during the Winter Quarter while simultaneously auditing the second part;

then during the Spring Quarter, I took the third part while auditing the fourth. By the end of the series I had regained much of my confidence in math—at least to the level I had reached at Iowa State. While Roggeveen might have wanted to help me refresh my mathematical abilities, he might just as well have wanted some confirmation that I was a suitable PhD candidate.

Soon, during the following quarter, another course gave me problems. But this one was a different story. It was called Use of Automatic Digital Computers taught as an undergraduate course by instructors from the Computer Science Department. Today, it might be titled simply Computer Programming. The course started off badly for me, but then most of the class was in the same boat because our instructors were more technicians than teachers who spoke computerize. That is, we figured that they were so steeped in their discipline that it was difficult for them to communicate with those of us being exposed to the subject for the first time. Fortunately for me, I found myself taking the course with Mat Altenhofen who entered the PhD program the same time I did. Several years older than I, Mat had worked for years with the Army Corps of Engineers before joining SRI. He said he had graduated second in his class at West Point! Characteristically, he told me that he could have been first, except that such an honor didn't interest him. This was not hard to believe, because he could not bring himself to write a dissertation, which he termed a phony exercise. In any case, Mat was able to eventually decipher our instructor's lectures and homework instructions by relying on basic principles in figuring out how to proceed. Another help in learning the subject was the course's reliance on some seven homework problems which each student was to solve by writing a computer program in Balgol (predecessor to Algol which was eventually superceded by Fortran and other languages), punching the codes into cards, and submitting the package at the computer center that housed row upon row of huge processing machines in an air-conditioned environment.

Thus, by brute force did we learn the subject, frequently by short-changing our other courses. More than once I stayed up all night before getting my program to run satisfactorily. It wasn't that I *determined* to stay up until I got it right; it was the nature of the beast. I would get a printout of my program, which would show one or more errors. Making whatever correction was

needed I would resubmit the program then wait (sometimes for 45 minutes, since others were in line ahead of me). Encountering another error I would repeat the process. It just kept "stringing us along" until we got the assignment right. Once I took Vicky to the center at 4:00 a.m. and the place was all lit up and swarming with activity. Neither one of us had seen anything like this before.

Another undergraduate course that gave me trouble was Linear Algebra and Matrix

Theory, but this occurred during my second year after I had established a respectable grade point
so that I did not feel in jeopardy. However, the course confirmed to me just how limited my
mathematical abilities were. As long as I could visualize a problem I could get along reasonably
well. Consequently, the first part, which dealt with *set theory*, was not a problem. Although,
when the instructor introduced the topic, a fuzzy faced kid sitting next to me who looked all of
seventeen, said, "Oh, no. Not this again." But once the subject turned abstract, as it did with
multiple spaces, I began to lose my way. I simply couldn't visualize multidimensional spaces
beyond the level of three. For example, "What is a five-dimensional space?" I think I
understand now, but not at the time. It's simply a mathematical description with five variables,
rather than the three I had been used to. This time, another PhD candidate in the EES program,
Ruben Amir, came to my rescue by helping me understand enough of the concepts to earn a
course grade of B. Ruben, an Israeli who excelled in math, graduated and returned home to teach
at Technion University in Haifa.

Operations Research, an applied course grounded in mathematics, was not so difficult for me; although, there were times when I floundered. But so did many others taking the course with me. Passing grades for some of the mid-course tests were as low as 20 percent; while the highest grade of all might be less than 50 percent. Such low percentages revealed the complexity of the subject and the difficulty of the tests, rather than the quality of the instructions, which were interesting and good. These results simply revealed our instructors' approach to grading. Years later, when I was a teacher myself, I once fielded a student's complaint in class about *grading on the curve*. She thought that an average of 60 for one of the tests I had given meant that I had

designed the test poorly. Somewhere in her upbringing she had gotten the idea that grades on the order of 90 and above were As, 80 to 89 were Bs, and so on. I responded with the above example from my Stanford experience; but that failed to impress her.

The three-quarter graduate series I took in Economic Development was particularly interesting to me, since that was where I hoped to go professionally. Paul Baran taught the first quarter. Reportedly he was the only tenured Marxist professor in any major US university at the time. He lectured for three straight hours twice a week, mostly without notes peering at us with squinty eyes through the thick cloud of smoke floating up from his cigarette. He said he would not grade on anything he said in class, but only on the assigned readings, which included large amounts of lesser known as well as better known works on socialist thought. I guess he didn't much care if we attended his lectures or not. I was able to get though the course without buying into his persuasive line. I took three things away from the course: first, Marx, Engels, and the rest spent more time trashing the capitalist system than offering a meaningful substitute; second, Baran used a lot of words intended to appeal to one's emotion rather than reason (e.g., the *greedy* capitalists, the down-trodden workers, usurious interest rates), as well as hitting hard on the wastefulness of advertizing and the conspicuous consumption of the rich; and third, I learned to spot those with a Marxist persuasion by the buzz words they used. I saw through the derogatory adjectives, but found some sense in his criticism of Madison Avenue types. The course grade came from a single test at the end of the quarter. He died over Christmas break, so my initial grade of B+ was subsequently upgraded to an A based the following courses in this series.

The other graduate course I took from the Economics Department was, Price and Allocation Theory. A grade of an A or B in this course, along with the A I received in the Development Economics course, would have helped qualified me for a PhD in Economics. But I had chosen not to go this route. The most difficult part of Price and Allocation Theory was the huge amount of reading made difficult by my lack of economic courses at the undergraduate level. The difficulty arose because so many of the terms and concepts in the reading were new to me.

Eugene Grant of the Industrial Engineering Dept., taught us Engineering Economy. Grant was practically a living legend because of his pioneering work in teaching engineers about the economics of decision making. While the course had economics in its title, the subject concerns basic investment-decision making for public works, business, and even personal decisions and does not rely on elementary theory as taught by economists. While I took the course because it was required, I ended up making far more use of it than I could have imagined at the time.

Having failed to learn much of anything from the Theory of Probability course, I had another go at Statistics by taking the undergraduate course, Statistical Methods in Engineering, taught by the Department head. To my surprise I received an A+ for the course. Go figure!

Decisions about roads, power, water, and other such investments usually take place in the public sector because of their size. Consequently, I thought it worthwhile to take the undergraduate course, Public Administration, which I did during my final quarter of courses. By this time, I was perhaps over confident. So, the B I received for the course came as a surprise. When I quarried the young instructor about my grade, he said that the course paper I had written failed to show that I had learned much.

Finally, in this run-down of courses was Elementary French. The word *elementary* is deceiving, since in ten short weeks those of us taking the course were expected to be able to translate from French to English. It was a good thing that this course came during my final quarter, when my work load was relatively light, because I devoted some five hours for each of the three weekly assignments. While demanding, I was able to pick up the language relatively easily because conjugations and reflexive forms wee similar to those in Spanish and many nouns were similar to their English equivalents (e.g., *tranportacion*). But, of course, French and Spanish are Romance languages. The course's limited scope rested on the idea that PhD candidates would be able to access documents other than those written in English language. The A I received met this requirement, although a B would have been sufficient. As for the other language, I tested out of Spanish simply by taking a written exam. Although I had left Venezuela

seven years earlier, I felt confident enough that I spent little time in preparation. But had I failed the exam, I would have been given another chance.

By the spring quarter of the first year I had established a suitable grade point that Roggeveen suggested I sit for my admission to candidacy. Had this been in the Economics Department, I would have had to pass a set of qualifying courses with considerably more than a B average. But, given the newness of the EES program and the way it was administered, my exam consisted of spending a relaxed, informal two hours one Saturday morning with Roggeveen and Clark Oglesby, who sitting in our shirt sleeves asked questions such as, "How would you evaluate a proposal to build a state highway through the Redwoods?" I think my response was little more then, "I'd look at the alternatives." I had wanted to spend time preparing for this exam, but Roggeveen so much as told me not to bother. I was sure to pass, which I did. Prof. Oglesby was a senior member of the Civil Engineering Department who had made a name for himself by writing the popular *Highway Engineering*. He was a pleasant, effective, and a solid engineer who had limited exposure to the economics and other disciplines, but was willing to learn. Once sitting next to me during a seminar given by Boon, he leaned over to me and whispered, "Does this guy know what he's talking about?" This question put me in a difficult position because I found Boon's approach to project evaluation for the developing countries a line with what I wished to follow. In time Oglesby came to appreciate what Boon was teaching.

By the time I finished my first academic year of classes and had been officially admitted to the program via the foregoing perfunctory exam, I felt comfortable having returned to school and looked forward to my second year of classes and writing my dissertation. During the summer, I returned to Sherm's "shop" and more or less picked up where I had left off. But this time, rather than having a project of my own, I gathered mostly energy data in the Bay Area and in Southern California. This rather grinding experience was enough to reassure me that I had made the right decision in returning to school. Then in late September, our fourth child, Paul, was born in the nearby town of Sunnyvale.

Contrasted with my experiences at Iowa State and Harvard, my association with my fellow students at Stanford was minimal, since few if any of us were following a common set of courses nor exploring a similar dissertation topic. My association with Altenhofen was the closest because of our long time together and common employment with SRI. I knew Amir only briefly because of the Linear Algebra course we took together and my need for help. Perhaps the one with whom I had the most in common was Henry Steiner due to our mutual interest in developing countries. He had lived in Mexico and married a Mexican. We frequently left campus on our way home and talked about our courses and what we hope to write about for our dissertation. We even briefly shared an office together in the basement of the engineering building. Henry was a renaissance guy with an unbelievable work ethic. He took some 21 hours at the graduate level, which was almost unheard of, was interested in creative writing which led him to take creative writing from the renown fiction writer, Wallace Stegner, and put me onto Cliff Whorton, a visiting professor who later became Chancellor of the entire New York University system. Moreover, we both intended to write our dissertations about transportation in the developing countries. I thought because of these interests there was bond between us. Unfortunately not so. He once asked me why I worked so hard and I told him it was fear driven, which prompted a response that I was acting cowardly. But more seriously was the mistake I made of carelessly by writing a short, facetious note on a draft of his dissertation that he had left on his desk. I had only read the cover page and had nothing insidious in mind. Just one of the flippant things I sometimes do. When he saw it, he exploded accusing me of stealing his ideas. How sad, since his dissertation was based on labor-intensive methods of road construction and had little to do with my idea of using penetration roads to stimulate economic development.² In fact, I found his finished product rather simplistic and not worth emulating. Our friendship never recovered, which I still consider a loss.

² One of the approaches for helping poor countries (sometimes call the *undeveloped countries*, more politely the *less developed countries*, or simply LDCs), was to make use of their abundant resources, mainly unskilled labor, and conserve their scarce resources, such as capital and foreign exchange. Now, that approach is commonly accepted, but at the time, less so. Henry's approach focused on unskilled labor.

As for grades, the C in Probability Theory that I received the very first quarter was the only low grade I got. I received Bs in Linear Algebra, Public Administration, and the second Calculus course, a B+ in Economics of Public Works, and all the rest were As, except for the A+ in Statistical Methods in Engineering. The several courses in EES, including seminars, were almost sure-fire As. Within the EES graduate program I was essentially competing for the As, which tended to go to the upper half of the class. After all, anything less than a B was failing. So my overall grade point of 3.7 was no big deal. On the other hand, I had to compete against the economic graduates for the courses I took in that department where As were a premium; and at the undergraduate level where the full array of grades from A to F were possible.

By the spring of 1964 I had completed all but one of my required courses leaving me time to focus on my dissertation. I began by haphazardly reviewing the literature based on what I thought my dissertation might include. I read about transportation in general, about highways and roads, and how standard procedures for evaluating road investments in the USA would differ from those for roads in developing countries. For example, studies to justify road investments, new or upgrades, considered savings in transportation costs; whereas, roads built to open new areas for economic growth would involve little traffic, at least initially. I toyed with the idea of how engineering economy, which took a narrow view of a particular investment, differed from development economics, which looked at the impact of investments on the whole economy. The writings of Jan Tinbergen, a Nobel Laureate in Economics, about shadow prices caught my attention. His argument was that market prices, especially in LDCs, did not represent the value of many inputs or outputs in terms of economic growth. For example, wage laws and labor immobility often caused the market wage for unskilled labor to be above its true value to the economy, or government control over foreign exchange often meant some sectors of the economy had favored access at prices lower than what those sectors would be willing to pay. Also, in the macroeconomic area, Wassily Leontief's input-output model made it possible to estimate how changes in one sector of the national economy affected other sectors. Also, since I was thinking about how new or better roads in a region might promote agricultural production, I read about small-farmer production. I also considered alternative criteria. But these ideas were disjointed

and had no underlying theme. Even so, by reading broadly about them I was gradually expanding my understanding of the issues. Meanwhile I applied for, and received, financial support from SRI while working on my dissertation, since Ford Foundation funding ceased once I finished my course work. My next move was to prepare an outline of my dissertation.

By the time fall quarter arrived, I was well into my literature review, made lots of notes on my findings, updated my outline, and had begun writing—prematurely, as it turned out. While I had an idea as to what I wanted to accomplish, the idea was too nebulous. I wrote in the hope that something would materialize. As might be expected, this approach was ineffective, except that the process of writing got me thinking seriously about what I hoped to accomplish. The problem was my lack of focus. Simultaneously, I was auditing a course on numerical analysis, which turned out to be of little value and financial institutions, which was a graduate course in the Economics Department.

Vicky eventually brought me up short saying, "You've taken courses long enough. You have a family of six to support. Now, it's time to get on with your dissertation and finish up your program." I realized she was making sense. But at about this time, Sherm called saying he wanted me to go to Spain to help him on an SRI study of the Spanish petroleum industry and Campsa³, a state-owned monopoly. SRI had undertaken a study of the demand and supply for petroleum products, which included full spectrum: heavy fuels for generating electricity, diesel fuel for its many uses, gasoline, lubricants, kerosene, and other light-end products. He said the two-man team that was there badly needed someone who knew Spanish. I got him to promise that the assignment would be no more than six months and to cover the expenses of having my whole family with me while there. He did the latter by providing a bonus to my salary sufficient for our living expenses while in Spain and a first-class airline ticket that I could trade in for economy fare thereby offsetting the fares for Vicky and our four children. This arrangement might have fallen somewhat short of covering all of our expenses, but now I was back on-salary.

³ CAMPSA is the Spanish acronym for Compañia Arrendataria del Monopolio del Petróleo, SA., the State owned petroleum products monopoly.

The break was fortunate because it broke the ice on what I had been doing. I stopped auditing courses and was forced to give up my futile efforts at writing a dissertation in which I was just floundering.

Sojourn in Spain

On December 2nd my parents drove us to the San Francisco airport where Vicky and I and our four young children boarded a TWA flight for the New York connection to Madrid. This was an exciting event for me because I had not been to Europe before; less so for Vicky who had been there for two months during the winter of '50 - '51 visiting her brother George and his family. George, a West Point graduate, was with the U.S. Armored Division at Weiden, Bavaria patrolling the Czechoslovakian border. Becky was about to turn nine, Tim had just turned seven, Mike would be four in two months, and Paul a mere 14 months! I was nervous as I usually am when taking on a new assignment, but this time the trip itself was scary. After the crew on the NY-Madrid leg served us dinner and eventually turned down the lights for those wishing to sleep, a film came on the screen. It was Fail Safe, a story starring Peters Sellers about the USA dropping the atomic bomb on Russia. In the film the character actor, Slim Pickens, straddled the bomb as it made its way out of the bomb bay doors waiving his cowboy hat and shouting as he and his cargo made their way to earth. What a spooky movie to show while crossing a vast dark ocean in the middle of the night. Fortunately, I was the only one of our family to see it. Vicky and the children were sound asleep.

As we approached Barajas International Airport just before 11:00 a.m., we looked down on a flat, barren, and cold terrain. Madrid, a city of 2.5 million, was just 15 kilometers⁴ away set on a high plateau at roughly the same latitude as New York City, but 650 meters above sea level. Bill Sharpe, SRI's project leader, met us after we cleared customs and helped us with our

⁴ Once overseas I sometimes try to think in local terms, such as kilometers, kilograms, hectares, centigrade, and date order (day, month, year), which helps in communicating with others and in writing my reports.

baggage. I had worked on one of Bill's projects in Menlo Park and looked forward to working with him again. All went smoothly, except that the box containing my dissertation materials was missing! Somehow, I had the illusion that I would have time to work on the dissertation during off hours. So, I had brought a large collection of materials with me. I took a claim check for the missing box⁵ and we headed for town. Upon reaching the city we wound our way along the busy streets typically with gray, five-story buildings on either side. Our driver soon pulled up in front of an elegant hotel fronting a side street that paralleled one of the city's many tree-lined boulevards. Austere in winter, these boulevards must have been lovely during the warm months. Not knowing our tastes, Bill had booked us into the Fenix, one of the city's nicer residential hotels.

A smallish doorman of perhaps fifty, decked out in fancy uniform, stood in front of the entrance. He welcomed us, directed us inside, then attended to our luggage. In time we learned that many of these doormen might have college or even advanced degrees simply because professional jobs for their age group were so difficult to come by. Years gone by when they entered the work force, the Spanish economy had been depressed during its Civil War and then World War II and good jobs were not available. Now, the economy was doing much better, but many men like these were stuck in the jobs they had held for years.

In registering, we noticed to our horror that the room rate could exceed our entire per diem allowance were we to stay here. Near panic, Vicky and I decided to leave the hotel as soon as we could find accommodations more suited to our budget. Once in our room, I rested as best I could in preparation for an afternoon meeting with the Spanish counterparts on our project. Vicky put the children to bed, since it was still night back home and they had rested only fitfully onboard the plane. She then arranged for a baby sitter to look after them while she went out apartment hunting. With a list of rentals in-hand that Bill had provided us, she hired a taxi by the hour and headed out. This was a gutsy act, since she had slept less than I had on the plane and hadn't

⁵ After several trips to the airport and considerable worry I eventually recovered the box.

conversed in Spanish for eight years. Still, her Spanish was good enough and the taxi driver was accommodating. After several hours of shopping around, she found the *Residencia Waldorf*, which was available on a day-by-day basis.

Around 6:30 we went down to the hotel's main dining room children in tow: Becky holding on to Paul's hand and Tim onto Mike's hand. Sensing we didn't know what we were doing (local families eat much later and *without* their children) the head waiter put us in a corner, pretty much by ourselves, at a large table all decked out with fine linen, silverware, and narrow-stemmed goblets. There, three tight-lipped attendants surrounded us. Paul, uncontrollable at this age, kept taking one of the utensils and throwing it on the floor, which an attendant would quickly pick it up and set aside, then go to an adjoining table for a replacement to put back in front of Paul—a process repeated several times, while the two other attendants muffled their laughs. Vicky was tense and I had a nervous knot in the small of my back. We couldn't finish our dinner soon enough. The next day we relied on room service for breakfast and lunch.

That afternoon I skipped work to help us check out of the *Fenix* and into the Waldorf, which was suitable, at least temporarily. I say temporarily because our fifth-floor apartment, though large enough and cheap enough, was dark, dingy, and dusty. The windows were not barred and the elevator had an open grill. With our rambunctious children, we feared one of them might climb out the window or stick his head through the elevator grill. We soon concluded that we needed to find still another place, which we did two days later. Red Scarff, the other SRI member of our team, said that an apartment was available where he and his wife, Nancy, were staying. Known by its address *Quintana Veinte-dos* (22 Quintana St.) was a modern complex only two kilometers from our downtown office, not only much cleaner than the Waldorf, but scarcely more expensive.

⁶Sadly, one of Tim's classmates in the school where we eventually enrolled him, was decapitated by the same type of open-grilled elevator.

While satisfactory, our two-bedroom apartment had its limitations. We hung a blanket over an opening to a sitting room to darken it so that Paul could sleep. The kitchen was so narrow that two could not pass, the refrigerator was small in keeping with the size of the kitchen, the stove consisted of little more than two hot-plate burners, and each night cockroaches streamed in through the kitchen's exhaust vent that opened into a shaft that ran the full height of the building. Due to a city-wide water shortage Vicky had to fill the bathtub during the two hours that water was available so that I could take a bath when I came home from work. Still, we were satisfied with our accommodations. Located in a pleasant part of town, our second-story apartment had a small balcony that overlooked the tree-line street below. And we were just two short blocks from the *Parque del Oeste*, a large grassed area with gravel paths that offered Becky, Tim, and Mike a chance to burn off the energy they stored up from being cooped up inside. Of interest too was the view the park offered of the rail yard off in the distance and far below us with the bustle of train arriving and departing.

While staying at *Quintana 22*, we learned about a family of Cuban exiles who were staying on the same floor as we were. They kept pretty much to themselves, although we would nod to each other when we passed in the hall. We soon found out that, although most Europeans are courteous, even friendly once properly introduced, they are far less prone to greet a stranger. I guess not unlike passing someone on the street in New York City, or even Las Vegas for that matter. One evening as Vicky and I entered the small lobby of our complex we saw a dark, slender, even foreboding man talking with the concierge. We thought we might have seen him before. We had, but not in person. He was John Carradine, at the time a well known character actor, who was also staying in the same building. Our other contact with Hollywood, although indirectly, came through two female friends of Bill currently working in Madrid. One evening in our apartment they told of being hired for one of the John Wayne films shot on the plains west of Madrid. The word was that some of these so-called *Spaghetti Westerns* were being produced abroad because the costs were so much less than in the States. They said that Wayne, who reportedly downed a liter of Scotch each day, was friendly and easy to work with.

Because the school year was still on, we made arrangements for Becky and Tim to attend the American Community school. Poor kids. They left on the school bus before it was light and returned after it was dark. Not an experience that either one of them remembers with pleasure. Mike was too young for kindergarten, but we found a Catholic school for youngsters his age. The nuns, who taught, did so in Spanish. Mike and a young French boy were the only two non-Spanish speakers in his class of 30 boys. But before long, Mike would return after the half-day sessions asking what various Spanish phrases meant. When in Spanish we commanded him to run, he would do so. He wanted to know the Spanish word for overcoat, then rejected the one we suggested because it was different from the one he had heard. And, as young Spanish boys are wont to do, he would place his hands up the side of his head forefingers pointing outward and make believe he were a charging bull. By the time we left Mike had learned a lot of words and phrases, which he was soon to forgot once we returned home. Now, working among the *Latinos* in Southern California he is in the process of relearning some of them again.

Our office was just up the street from the *Puerta del Sol*, a large round-about and the point from which all distances in Spain are measured because it is supposedly the center of the country. Sometimes for a break or when I had missed breakfast at home, I would walk round the corner to a small coffee shop of some five x ten meters wedged in among other office entrances. Finding a spot at the standup bar, I would order freshly squeezed *thumo de naranja* (orange juice), delicious deep-fat fried crullers dipped in powdered sugar (similar to the French *beignets* served in New Orleans), and steaming espresso. Absolutely delicious. To our surprise we soon found out how few of the shop keepers spoke English. Recognizing our faltering Spanish most would confuse us with the French, since so many from that country were visiting Spain.

After work I would sometimes walk a few blocks to the Metro that ran below *Avenida Princesa* to the north with an eventual stop two blocks from our apartment. Once while standing in the isle deep in thought, I suddenly realized that I was looking down at the top of the head of a middle-aged Spaniard and thought, "Gosh, he's small." Then with a start I realized he was talking with a lady a full head shorter than he was! With this experience, I came to realize that,

except for the Bosque, most Spaniards are short. As another example, the man who brought milk to our apartment was shorter than Becky, and she was only nine years old. So, whenever we paid admission in which children under 12 were charged a reduced rate, we carried Becky's passport to prove her age. Then, as the weather moderated with the approach of spring, I would occasional walk home. My path took me down the street past the *Puerto del Sol*, then across the gardens in front of the Royal Palace. From there I walked along the edge of the *Plaza de España* with its statue of Don Quixote and his sidekick, Sancho Panza, and finally up the street past a pastry shop with its showcase of delicious looking pastries and candies, including my favorite, the almond-based marzipan.

Our team from SRI headquarters, which had been in-country for several weeks before our arrival, comprised Bill Sharp as team leader, Red Scarff as his backup, and Nancy (Red's wife) who as a typical SRI research assistant gathered data from various sources throughout the city, "pushed" numbers, and otherwise helped out. Once they had settled in, Bill hired Gloria Bokhari as the project's secretary, a chauffeur who we used mostly for driving us to meetings around town, a thirty-year-old "office boy" who took care of the mail and made us coffee, a street-level doorman to limit access to our offices, and a cleaning lady. Our formal contact with *Campsa* was Rodolfo Mantilla.

As team leader Bill had responsibility for our progress, liaising with *Campsa*, preparing interim reports for Sherm back in Menlo Park, and outlining the final report. He also studied and wrote about the petroleum industry in Spain. With a PhD on the French franc, Bill had lived and studied in France. He was not only a gifted writer and brilliant, he was lovely to work for: low key, soft in his mannerisms but not effeminate, and although divorced, romantic. He had two female friends from his early time in France. And it wasn't long before he began asking Gloria out to lunch, even though she showed no evidence of being estranged from her husband. We never learned nor did we ask about his divorce, but he must have been a pushover for women if his dealings with his five-year-old daughter were any indication. Once when she was spending time with him, he asked what she wanted for breakfast to which she replied, "Ice cream." "But

that is desert, he said, "You're not supposed to have that in the morning." But she persisted, so he gave it to her. He then asked us, "What else could I do?"

In his mid 30s, Red was a tall, slender, good looking guy with lots of energy and a devil-may-care attitude reflective of his having been an Army pilot. He supported Bill in various ways, including taking a close look at *Campsa's* marketing facilities, estimating the supply and demand for electricity, and drawing up energy balances. Given an assignment he would set about it immediately, often without thinking through what he might find or how to deal with what he did find. His wife, Nancy, was attractive, several years younger than Red, and a prototype of the woman's libber soon to emerge. A typical scene, whether on the job or out on the town would be to see Red striding down the sidewalk with Nancy half a dozen steps behind struggling to keep up. Given Red's show of indifference and Nancy's struggle to stick up for herself, it didn't surprise us to learn several years later that the two had divorced.

Playing a key role in the effectiveness of our team was Gloria Bokhari. She was a lovely women of about thirty with dark brown eyes and long brown hair, possessing a sweet smile, a pleasant figure, and extremely resourceful. She was a Spanish citizen with Spanish-German parents. Years earlier, she had married a Pakistani army pilot while he was in Spain receiving training. What had attracted her to him was her similarity in looks to Pakistani women. After his training they had returned to Pakistan where she bore him five children. She had recently returned to Madrid to visit her sister and to earn enough money so that she could return with several household appliances she couldn't afford to purchase in Pakistan. Her wide knowledge of the Spanish bureaucracy served us well, for she was able to sweet talk government officials, and others, into granting us time for interviews or making closely held publications and unpublished data available to us. She spoke English like a native. And she made the best cup of tea ever. When mixed with cream and sugar it had the consistency of strong-bodied coffee. As much as I have tried since then, I have never been able to duplicate it.

Of much less use to us, although an interesting guy to know, was Rodolfo Mantilla, our formal contact with *Campsa*. He was large like the Basque, but insisted he wasn't Basque. Definitely from Spain's old school. Often Gloria would go to him when she needed support when arranging meetings. Rodolfo was able to help us out through his contacts, rather than his technical knowledge about the petroleum industry or his interest in our study.

Because of my recent work at Stanford on national accounts, Bill asked me to estimate Spain's GNP, imports and exports, population growth, and price trends, along with regional breakdowns of these. Later, he asked me to forecast gasoline and automotive diesel consumption. The former task required that I do a lot of interviews with officials at such places as the Statistical Office, National Planning, and the major banks. This assignment was relatively straightforward, given the recent work on my dissertation. The major challenge was that the interviews and documents were all in Spanish.

The forecasts of gasoline and automotive diesel consumption turned out to be particularly interesting for me in that I hit upon a estimating approach unlike any I had seen before—one that grew out of my study of the Spanish economy. By looking at about ten European countries in various stages of development, I was able to correlate the several types of vehicles registered within a country with its per capita GNP. What I found was that during the early stages of a country's economic development, buses and heavy trucks predominated. Then as a country's economy grew, motor scooters took over. And finally, scooter ownership retreated in favor of personal vehicles at the same time that trucks and buses became a small percentage of what was known as the "auto park." Since the per capita GNP for Spain lagged many of these European countries and having forecast Spain's per capita GNP through my other assignment, I was able to estimate with considerable confidence the future path of its vehicle ownership. Then, with data on average mileage by type of vehicle and by estimating fuel consumption rates, I was able to forecast gasoline and diesel demand for highway use. My estimates were largely unchallenged, since my forecasts based on this type of rationale had not been seen before. Either that or no one bothered to look. In any case, this was an interesting exercise full of challenge and discovery.

I had a brief but chilling experience concerning my estimates of Spain's GNP. My primary source for the annual reports was the Bureau of Statistics. But as I got into the subject, I learned that National Planning also made estimates of the country's GNP. When I eventually got down to looking at these two estimates of output I realized different they were. Upon asking around, I learned that "Everyone in Spain who works with these data know that the estimates by Planning are inflated." Fine! Everyone who has spent much time in Spain, but perhaps not those of us who come here for the first time on short-term assignments. No one had warned me about the inaccuracy of the Planning figures, normally a reliable source. Only by routinely checking the figures did I find the discrepancy What gave me the chills was my recollection of being wrong about my estimates of cement shipments to Alaska.

Once we had gotten settled, Bill arranged to have Señorita Lopez come to our apartment once a week to give the five of us two-hour Spanish lessons. Sta. Lopez was middle aged and dark haired with the rigor of a schoolmarm. Although my ability in Spanish was ahead of the others, my needs were greater because of the many interviews I was doing. Although, through his fluency in French, Bill was able to improve his ability in Spanish quickly. Vicky through her frequent shopping and discussions with our cleaning lady made impressive strides as well. Red and Nancy made good progress as well. So, we all benefitted from these intensive sessions. One often hears from someone who has been exposed to Spanish as spoken in the Americas but not in Spain about how difficult it is to learn Castillian Spanish. Not so. The difference is mainly the th sound in place of the c and z sound. Thus, instead of saying cinco for five, one would say thinco, or instead of saying razón for reason, one would say rathón. Of course, some words are different in regions of a country, just as they are for most languages. For example, while I was in the Navy I heard one of my fellow sailors from West Virginia talk of mashing the button (of a light switch), rather than pushing it. Sta. Lopez also warned us about certain customs, such as stretching in a way that might expose one's armpits, which is considered crude. That's much how Muslims feel insulted when one shows the soles of one's shoes, or how Malaysian's feel when one pats the top of their head . . . or, so I'm told.

These sessions with Sta. Lopez helped considerably in bringing the spoken language back to me, but my interviews were frequently demanding. I remember in particular an interview I had with a heavyset official in his Bureau of Statistics office. He was sweating profusely as his rapid Spanish flowed off his tongue, presuming I was fluent. He would even hold his hand in front of his mouth so that I was denied the advantage of watching his lips. I would occasionally nod in recognition of a point just to keep him going. An alternative was to confess that I wasn't getting all that he was saying, but I didn't want to interrupt his train of thought. Before long, however, at convenient breaks I would "feed back" to him what I thought he had said. The intent was to confirm my understanding. Or, if I was missing the point, to have him express what he was saying in a different way. As it became clearer that I was losing some of what he said, he recognized my limitations and slowed up. By the time I left, our conversation was flowing rather smoothly at a pace I could comprehend. As I was leaving he said that he had studied in the States. Surprised, I blurted out, "Well, you must speak English." To which he replied, "Of course, but you were doing so well in Spanish that I let you keep going." What a boost to my confidence! This incident, perhaps more than anything else, convinced me of the value of using the language of the country one was in. Because it reveals an interest in, and a respect, for that While meriting effort, it's seldom easy to do. country.

Our working days were long, starting around 8:00 and often not ending till 9:00. This odd arrangement resulted from Spain being in transition from being an *old world* society to joining the *new world*. At this time, Spain was enjoying economic growth that was the envy of Europe, partly because of its industrial expansion and the stimulus of tourism. Concerning the latter, French citizens in particular were flocking to the Spanish beaches during the cold months, because of their quality, closeness, and the peso's favorable exchange rate. As a result of such growth, much of the private sector and some of the bureaucracy were switching to the more efficient hours

⁷ In time, as I encountered those whose native language was not English, I found that the ones who had lived abroad or frequently dealt with foreigners would not only speak more deliberately, but would avoid using slang.

of modern societies. In contrast, the *old world* segment, accentuated perhaps more by Spain than any other European country, was one in which the clock is simply pushed back. Work begins at 10:00 runs to 2:00, stops for an extended lunch and siesta, resumes around 4:30, and ends between 9:00 and 10:00. We were straddling both systems, since our contacts belonged in each of these two worlds. Once, at 4:30 Gloria in attempting to set up an appointment, was told "*He's not in yet this morning*." Another time, Bill, Red, and I had a dinner meeting with the National Director of Planning that began at midnight and lasted several hours. On New Year's eve we saw couples leisurely strolling the sidewalks below our apartment at 2:00 a.m.

We also adhered to the European custom at that time of working Saturday mornings. This didn't bother me, since I had done so for nearly five years in Venezuela, not to mention the frequent weekends many of us put in at SRI. In fact, at the time, it seemed as though the United States was one of the few countries in the world whose workers enjoyed the two-day weekend. The situation has since changed. Now, we in States are reputed to have a stronger work ethic than in Europe by averaging more hours per year.

Another Spanish curiosity happened to the three of us. Shortly after my arrival, Mantilla had arranged for a meeting with the Minister of Industry. Mantilla had failed to show up, so the three of us were on our own. Walking into the ornate Ministry building, we found our way to the Minister's personal secretary who asked us to stay in the waiting room until His Excellency was available. Before long, a distinguished gentleman came into the room and began talking about "His Excellency" this and "His Excellency" that. We assumed that this must be one of the Minister's chief lieutenants who was briefing us in preparation for the pending meeting. Finally, after perhaps 20 minutes it suddenly dawned on us that we were talking with the Minister himself! whose custom it was to speak of himself in the third person. Eventually we learned that the Minister, as well as other top government officials, were members of Opus Dei, the somewhat secret Catholic society.

On the home front, Vicky had hired a cleaning lady who doubled as occasional baby sitter. This arrangement gave her time to shop, as well as for the two of us to go out on the town once in awhile. Because of our family size and the limited refrigeration capacity, Vicky needed to shop nearly every day. Unlike the supermarkets at home, she had to go to individual shops for bread, milk, beef and lamb, poultry, fish, vegetables, canned goods, and beverages. This daily encounter in the market place was what helped Vicky improve her Spanish as rapidly as it did.

Being cooped up in a small apartment was not easy for a family of six, especially when our children were used to our neighborhood in Los Altos with its cul-de-sac where they could freely run without fear of traffic. So, when I had time to spare, which wasn't often, I would take Becky, Tim, and Mike down to the *Parque del Oeste* to romp around. Sometimes Vicky with Paul in his stroller would join us. One weekend after a 6" snowfall, we threw snowballs and made a snowman. Not so pleasant, however, was the short walk to and from the park because the locals who walk their dogs neither curbed them nor cleaned up their mess. Sometimes on a Sunday evening the six of us would stroll the few blocks up to the busy *Avenida Princesa* just to get out of the apartment. We would gaze in the shop windows or simply watch the passing traffic. More often than not we ended up buying skinny hotdogs in a bun and an ice cream bar from the sidewalk vendors. With limited opportunities for entertainment the children looked forward to these simple outings.

But my work was not so demanding or Vicky's confinement so severe as the above might seem. Especially enjoyable were the long lunch hours Spanish custom allowed us to take. About once a week Vicky would come to our office then Bill, the Scarffs, and we would head for one of the many excellent restaurants nearby. There was Lardi's just across the street on the second floor with its beautifully appointed furniture, chandeliers, waiters in tails, and tables set with linen, silverware, and crystal. Given the favorable foreign exchange rate, these two-hour long lunch breaks were a bargain. Several blocks away was the Edelweiss, which was one of my favorites because of its excellent German soups. Vicky's favorites were the seafood spreads we would enjoy that consisted of shrimp, catch of the day, scallops, mussels, barnacles, and god

knows what all coming up from the Mediterranean or the Atlantic each morning. Not so delightful was her exposure to the exotic and expensive *angulas* that she once ordered in response to Sherm's plodding. These are black baby eels served on a plate by themselves all in a line, with the small, silvery single eye staring up at the eater. Screwing up her nerve Vicky got through this rare, Spanish delicacy. But in reality she felt like she were eating *worms*. These mid-day luncheons invariably came with wine, as is the customar in France. Once we saw two Spaniards at a table, each with his own bottle of wine that they either finished at one sitting, or stored the remainder in a private locker. Wine at five cents a glass was excellent and cheaper than water. "These Europeans know how to live," Sherm liked to say after one of his trips. Good food in elegant settings was one of the rewards he liked to give his staff whenever he had the chance.

A few times the five of us would go out on the town. We would tapas hop. Typical of Spain, and perhaps elsewhere, were *tavernas* with long counters piled with all sorts of hors d'oeuvres where one could stand (or sit if a table were available), drink glasses of wine or sangria (red wine mixed with fruit juice) and order, usually several times during the night, a selection of delightful finger food such as garlic dripping grilled shrimp, salmon paste on thinly sliced pieces of toast, black and green olives, crab cakes . . . the selection seemed endless. The crowds, young and old, locals and tourists who frequented these places made the experience all the more exciting. Once, Bill took us to a downstairs, smoked-filled nightclub to watch flamenco dancers which is one of Spain's famous attractions. Sitting close to a small stage we followed the lean, dark strutting men imitating the Spanish full fight and the señoritas with their flashing eyes, flowing skirts, off-the-shoulder blouses, and rose-studded hair enticing the men in their high heels to even more intricate steps, the women's castanet clicking to the rhythm of accompanying guitars. Another time we walked through the archways just off the *Plaza Mayor* to the *Casa* Sobrino de Botín, a cellar restaurant founded in 1725 and famous for its roast suckling pig. On the way to our table in this cave-like setting we passed gigantic ovens ablaze in which attendants used on long-handled wooden ladles to insert and extract the pigs.

Another time, following a Spanish lesson in our apartment, Bill, Vicky and I were sipping a collection of fine dry sherries, such as *Jerez de la Frontera* and *Tio Pepe*, for which Spain is noted—so much so that at one time they were a major export to the British Isles. Red, however, was "into his cups" drinking Spanish cognac to the point that he was spilling the drink on his tie. Nancy unable to get him to stop was gradually getting out of sorts and threatening to go back to their apartment on the floor above. Before that happened however, Nancy and I got to discussing our work, since we had gone out on a few assignments to collect reports or to copy data. Somehow, we got onto the topic of equal pay for equal work and I mistakenly suggested that women deserved their lower pay, because of their familial duties that made them less valuable on the job. That did it for her. She accused me of being a vile, male chauvinist. Up to that point in my life, I had thought of myself generally as a nice guy with whom most agreed. But I had just found out otherwise—a minor, but memorable experience in my life. I had now encountered my first Women's Libber, a forerunner of what was to come. Nancy and I made up the next day and we continued to collaborate effectively. But I had learned a lesson and something about myself.

Other outings included trips to the famous Prado art museum, the Royal Palace, *Plaza de la Cibeles*, the famous spot for those returning to Madrid, and, at Christmas time, the *Plaza Mayor* festively decked out in bright lights with open stalls lining the interior where all sorts of holiday gifts were being sold. Vicky bought a small Christmas tree and a creche consisting of a wooden manger and Plaster of Paris figures of the baby Jesus in his crib, the Madonna, Joseph, shepherds, and the three wise men. Occasionally we took day-long guided bus excursions. One of them was to Toledo, noted for its fine fillagree work and production of quality swords, as well as being the home of El Greco. Another trip was to Segovia to view the still functioning Roman aqueduct and the famous 11th century castle nearby. These weekend trips and our excursions around Madrid deepened our appreciation of Spanish history and culture. Becky could grasp the significance, but the boys were too young.

Once while on one of these outings we saw General Francisco Franco's cavalcade with limos in front and back and motorcycles along side, for he was still in power at that time. His influence was still being felt. Occasionally during one of my interviews when I would ask what was behind Spain's substantial economic growth in recent years, the loyal bureaucrat would begin by saying "Con veinte-cinco años de paz . . ." ("With 25 years of peace . . ."), which implied, "What else could you expect." Franco had successfully led the Insurgents during the Civil War and in 1939 with the war over he assumed dictatorial powers. Now, his supporters were celebrating the event not only with such sayings but with banners displayed throughout the county.

Then, as the New Year's holidays came upon us, including *El Dia de los Reyes* (Kings' day), Bill chose this time for us to visit other parts of Spain. This would not only broaden our understanding of the country but gave us a few days of vacation. Bill choose the Canary Islands, a Spanish possession in the Atlantic just off the southern coast of Morocco. Red and Nancy went to Cartagena, above the *Costa del Sol*, then over to Mallorca, one of the Balearic Islands in the Mediterranean; and being low man on the totem pole, we got to go north to the industrial area of Bilbao.

By mid-morning on January 2nd we loaded the family into a smallEnglish Ford that I rented and headed north through Burgos some 250 km away. Once there we visited the cathedral where a friendly nun offered leftovers from the day's ceremonial wafers to our children, who enjoyed them as they would ordinary cookies. We located the city's *parador* where we would stay the night. The Spanish Government, in support of its booming tourism industry refurbished many of its castles then offered them as low-cost, but elegant way stations for those visiting travelers. This one in Burgos had an impressive staircase with medieval coats of armor standing at each side. Our room was gigantic with massive oak furniture but cold. The next day we rose early so as to spend time along the north coast. We drove to San Sebastian on the Bay of Biscay close to the French boarder. This renown resort thrives in the summer time. But in the winter we found the wide promenades overlooking the beaches mostly deserted. From there we drove across the border to the picturesque fishing village of St. Jean de Luz. What struck us most from this quick glimpse of France were the brightly painted shops adorned with flowers and the neatly displayed fruits and vegetables. Not that Spanish shop keepers did not sometimes provide interesting

displays, but we had found much of Spain a study in gray tone, rather than the bright colors we had just seen.

After this short visit, we returned to Spain and drove the coastal road past the industrial and port city of Bilbao on to the resort area of Santander del Mar. There, we found a cobblestone plaza surrounded by fine stone buildings being restored to their 12th to 16th century fineness. Vicky and the family would stay there for the next two days while I drove back to Bilbao for interviews dealing with the region's economy and its anticipated demand for petroleum products. Bilbao with its steel mills and other heavy industry reminded me of the sooty, smoke-infused air of Pittsburgh during the late 1930s

The third day of our stay in the region was Kings' Day, which precluded further interviews. We took advantage of our location to visit the nearby Cave of Altamira, famous world-wide for its wonderfully preserved Paleolithic drawings of bison, wild boar, and other animals. At the time we were able to view these art forms up close. Since then, this access has been severely restricted due to the damaged caused by the carbon monoxide exhaled by the viewers. Although a winter storm was brewing and we had the steep climb over the Cordillera Cantabrica ahead of us, we nevertheless headed out. By the time we approached the summit, snow was falling heavily. I followed in the tracks of the several trucks that had preceded us as best I could, but our underpowered Ford with its low-clung chasse soon got stuck. As night drew near we looked around us and found nothing in sight. Eventually, a large truck, which was having no trouble plowing through the accumulated snow, stopped to help us. After helping us to get unstuck, he suggested that our best bet would be to return back down the road to a filling station, which had a small bar and eating area. There, the proprietor shook his head when I asked if he had a place to stay. But he suggested that we continue down the road a few miles and stop at a farmhouse set back about a hundred yards from the road saying that during the summer the family takes in tourists.

Although it was dark by now, we found the farm house, its lights were the only ones to be seen for miles around. I cautiously maneuvered our car up the narrow path to the house, walked up to the door, knocked, and waited unsure what reception I would get. The farmer, a husky, middle-age man, opened the door and listened as I explained our plight. He said that they did not take in guests during winter, but after I told him about my wife and four children in the car, he invited us inside. Once there, his wife and two grown daughters greeted us with broad smiles. They led us into their large kitchen with its roaring fire in the open hearth and proceeded to prepared hot chocolate for the children, hot coffee for Vicky and me, then prepared sandwiches of freshly baked bread and thick slices of *Serrano* ham (one of Spain's famous exports). Truly delicious! But then food always tastes good when one is hungry. While eating one Tim admired a small but highly decorated calendar on the wall. One of the daughters immediately got up, took down the calendar, and gave it to him. Somewhat surprised, he smiled sheepishly and thanked her. Over the years, I have found this practice of giving some modest item to the admirer fairly common, especially among those in traditional societies. It's a nice touch that doesn't cost much.

Finished with our meal and saying we were tired, the father said he would turn on the heat to the radiators in our two bedrooms. One of the daughters then guided us upstairs to our rooms. She apologized about the coldness by saying that it was difficult to correct since these rooms are not used during the winter. We waited a while for the radiators to heat up, but they didn't. Vicky in one bed cuddled Paul to keep him warm with Becky snuggling them both and I in another bed did the same with Mike and Tim. The stormy winds rattled the windows and the panes leaking cold air meant fitful sleep for us throughout the night. While we got some rest, we were glad when light finally shone through our windows. Our rooms had never gotten warm. So, we quickly packed our things and descended the stairs to the warmth of the kitchen with its open-hearth fire once again throwing out its heat. The daughters served us coffee and hot chocolate, scrambled eggs, toast, and more ham. The farmer insisted that we pay only a modest sum, saying it was an honor to serve us. We thanked them profusely and headed home. The skies had cleared during the night and the trucks had packed down the road so that we had no difficulty returning to Madrid. In the end we found the misfortune of getting stranded, being at the

mercy of the elements, and dependant on the locals provided a rare opportunity for us to experience the sublime generosity that one sometimes receives from strangers when traveling abroad. After such an experience Vicky and I, and possibly our two eldest, felt as though we could travel the world and find people of good will.

I got to know Mantilla much better four weeks later when Bill arranged for me to accompany him on a visit of the Navy and Air Force bases in Rota located at the entrance to the Mediterranean west of Gibraltar. Vicky and I flew to *Sevilla*, as the Spanish call this picturesque city in Andalusia, where we joined up with him and his wife, Olaya. That afternoon, Vicky and Olaya went shopping for antiques in the old Jewish section of the city. Olaya, an attractive blond in her mid-forties appeared every bit the foreigner, but was born and raised in Spain. A surprising number of Spaniards *are* blond. While shopping, those who attended us thinking that she was English, kept complimenting her about how good her Spanish was. That evening we dined together at the hotel. After we had finished the main course, one of the waiters brought out a huge bowl of fruit from which we were to take our pick. Mantilla a large man with an appetite to match took an orange. Finishing that, he took a pear. Then as he was about to take a banana, our waiter whisked away the bowl. Mantilla in his pleasant, relaxed manner was unfazed by the waiter's abrupt action. For all he knew, the bowl of fruit was there for him to take as much as he wanted. Later, after bidding goodnight to them, Vicky and I sought out the nightclub in the hotel's basement and danced to the music of a small jazz combo.

The next morning we drove to the bases where we met an admiral who was an old friend of Mantilla. He showed us around the complex while commenting on their fuel requirements. Before long we were headed back to *Seville* with a planned stop over for lunch. Given this time together I thought I could benefit from Mantilla's thoughts about what we had learned from the admiral and what we were to gain from the rest of our trip. So I turned to him with a question. "Not now," he said, "I do not think well on an empty stomach." To my surprise the lunch was a large affair with some fifty in attendance, including a French delegation. This gave me a chance to practice the language I had recently studied at Stanford. To my surprise, I was able to

comprehend quit a lot. During lunch, with Mantilla to one side, I returned to my questioning. But he said, "Not now. That would spoil the meal." With no opportunity presenting itself during our desert and coffee, I relaxed and joined in the small talk. When we finally got back into the car and settled into our seats, I turned to Mantilla once more only to find him sound asleep. But that was *our boy*, Mantilla: pleasant, gracious, and full of old-world charm, but often of little help to us.

The following day, one of Mantilla's friends was our escort for a day of sight seeing. We drove west past the breeding grounds of Andalusia's famous fighting bulls over to the monastery where Columbus reportedly stayed just prior to his departure for the New World. From the edge of a nearby cliff we looked down on the loading docks of Huelva, the location where Columbus was said to have filled his casks with water for the journey. With this scene before us, I thought of just how short a time it is between the historic events we were hearing about and the present. Finally, our guide took us to a beach home he had recently purchased following his wife's death. After that we headed back to *Sevilla*. That evening as Vicky and I were standing on the corner outside our hotel we heard a form of speech with the "swallowed" endings as in Venezuela. For example, instead of the normal *pescado* (a fish that has been caught) it was *pescao*, or instead of *cuidado* (be careful) it was *cuidao*. We thought of approaching the couple who were talking in this manner to ask if they were from Venezuela, but didn't. Later, we learned that many of those who had settled in Venezuela many years ago came from this part of Spain; and once there they retained the way they had spoken in their homeland.

Rather than return directly to Madrid, the next morning Vicky and I flew to Granada the site of the *Alhambra*, the famous hilltop fortress and palaces of the 13th and 14th century Moorish rulers. What impressed us along with the intricately carved arches was the system of water-filled channels. Our guide explained that the Moor's, obsessed by the aridness of their former conditions in North Africa, had built reservoirs that provided continually flowing water throughout the palace grounds. Luckily we were able to stay on the *Alhambra* grounds in one of the few rooms available at this *parador*. Later in the day, we caught a taxi down town so that we might visit the main cathedral. As we were walking out, a guide catching our eye, said that if we thought

the cathedral was impressive we should see the chapel with the solid gold altar. We accepted and soon we entered the chapel with gold alter and found it impressive. After a short while, he suggested still another site that a friend of his (another taxi driver) would take us to. About this time, we got the feeling we were being hustled. Declining we returned to our lodgings. The next morning we flew back to Madrid. I had been able to gather some information useful for our project; but the trip was mostly sight seeing and getting to know Mantilla better.

As the project wound down and Bill began drafting our final report, he got Vicky to do some of the typing for him. Vicky said she had never had a draft that was so easy to follow. The sentences were short and clear, the words just flowed, and there was scarcely any erasures or mark overs. Once when he had misplaced a few pages, rather than search for them, he said, "Oh well, I'll just write it again." Not I. Had that happened to me, I would have spent the better part of a day trying to find the draft, rather than do the rewriting. Bill had to be one of the best writer I had ever worked with.

While confident in his own abilities, Bill did worry, often quietly. When things got too much for him, he found getting a haircut soothing. As our project wound down, he resorted to them every several days; and the lunches with Gloria grew longer and more frequent. Once he asked Vicky, "Can't you get Bill to put something down on paper?" To which Vicky replied, "Don't worry, he'll start writing once he's ready." Unlike, Sandy back at Menlo Park who, shortly after being given an assignment, would write the rough draft of his final report leaving blanks for what he didn't know. This helped him focus on what data he needed to collect while greatly speeding up the process. I, in contrast, kept reading and probing until I had practically exhausted the topic before I began my first draft. The idea behind this plodding was my search for breakthroughs that would bring some new, unexpected light to bear on what I was doing. Not efficient, but satisfying to me.

Our three and a half month stay in Madrid ended on March 20th, Bill, Red, and Nancy having left before us. The night before our departure, the Mantillas invited us in for cocktails.

Their home just down the street from the Prado museum was elegantly appointed with antique furniture, tapestries, and original oils framed in gold leaf. We boarded our plain at 11:00 and arrived in Paris two hours later. Partly to give us an excuse to visit Paris, Sherm had asked me to call on the chief economist for Esso Standard and executives of Shell Françeis. Before he left, Bill had suggested we stay at the Hotel Normandie on Rue de la Banc near the Louvre.

Arriving at the Gare du Nord railway terminal in downtown Paris, we made our way out of the huge, domed station and hailed a cab. Relying on Spanish rather than either English or my elementary French, we gave the driver the address of our hotel. We had been alerted to the reputed impatience of Parisian taxi drivers; but we got along fine. This might have been due to our use of Spanish, this particular driver who might have liked children, or an inaccurate characterization of them. Who knows? We even found it easy checking into our hotel, which had receive our telegraphed reservations, because the clerk on duty was a Spaniard. Later, when we described the hotel to Bill, we learned that this hotel might not have been the one he had in mind. Apparently, there are many Hotel Normandies in Paris. Even so, our accommodations matched our expectations. We had two rooms on the top floor, five stories up, with sloping ceilings under slate roofs that overlooked a small park. And we were only a few blocks from a major open-stalled market where we sometimes strolled just to admire the wide array of beautifully displayed fruits, vegetables, and flowers. It even rained much of the time we were there, which was quite in keeping with our image this famous city. Finding a suitable place to eat was not easy for a family with four small children. Still, we managed well enough at the pedestrian restaurant next down, where we ordered scrambled eggs and other items whose French names sounded vaguely familiar.

On our fourth day there, I took a train to Brussels for more interviews on Sherm's behalf. There, I met a Barron Snoy and Monsieur Haullwille of the Belgian oil company, Petrofina, who were interested in our *Campsa* study. By late afternoon, after a busy but interesting day, I boarded the train for my return to Paris. After we were underway and our tickets punched, a crew member came down the isle asking if anyone wanted a souffle. Gaining confidence in my French and

thinking this might be some sort of light, puffy snack, I said yes. But my French was not as good as I thought, for I ended up eating a five-course meal. That might not have been so bad, except that Vicky *on her own* had gone ahead and booked us for dinner and the show at the *Merlin Rouge*!

Her day been somewhat of a strain trying to control our four youngsters in our two, small rooms on a rainy day. In the afternoon as the rains cleared, partially in desperation she took the children for a cruise on the Rhine. It didn't help that an elderly busy body chastised her for bring these youngsters on board, "Why one of them could fall overboard and drown! Your husband must be a rogue to leave you alone with four small children in Paris." So, our four days of Paris, where we had hoped to enjoy seeing the city turned out to be a drag, at least for Vicky. To top it off, that evening, I could scarcely get through my meal (I'm not a big eater to begin with), and when Vicky made some comment to me about the food, I didn't hear her. She followed my gaze to the ceiling where numerous show girls while whirling about naked to the waist on trapezes suspended from a moving cable. That night she was steaming. What got to her, she said, was the lecherous gleam in my eye. What could I say? I exited with the lame, "I don't see that sort of thing very often." We had started out our marriage with her saying, "You can look, but don't touch." After she had seen me "ogling" (as she put it) some young thing she didn't even want me to *look*. Now, after 53 years of marriage, this is still a sore point with her and one that probably should have been left out of this account. Thus ended our first overseas excursion as a family of six. The next day we boarded a plane for the States. Once back home Becky, Tim, and Mike wondered why Spanish was not spoken on our radio as it had in Madrid.

Dissertation

We chased the sun across the Atlantic, losing only a few hours on the day and landed at JFK mid-afternoon. I remember the thrill of seeing the Stars and Stripes as we taxied up to the terminal. Vicky's dad was waiting for us. We cleared customs, claimed our bags, and drove to the home in Hempstead. Vicky and the children would spend the next ten days there while I visited the United Nations in New York City followed by a full week in Wash D.C. At the UN I spent time at its library and book store and met with the Chief of the Transportation Section for

Latin America. SRI headquarters had arranged meetings for me with Professors Linsley and Roggeveen, who were working for the Executive Branch, Wilfred Owen of the Brookings Institute, Juan Baum of the World Bank, Robley Winfrey of Public Roads, and Wolfram Drewes of the Pan American Union.

Linsley, housed in the Old State Building across from the White House, thought my ideas were okay and suggested I continue along the lines I had started. Roggeveen, advised on transportation issues and introduced me to those with the International Road Federation. I hadn't realized the stature of the Brookings Institution, as a high-level policy organization. So, when I met with Wilfred Owen, who had only recently published *Strategy for Mobility* I was brought up short when he said, "All right, you have 30 minutes." Although abrupt, it was a good way to focus my attention. Baum was the World Bank's Assistant Director in charge of the Transportation Division. While courteous, he doubted what I was proposing would improve upon anything the Bank was already doing. Importantly, however, was his suggestion that I meet Herman Van der Tak, who was not only heavily into evaluation methodology but was in charge of a large study of the Bank's recently financed highway project in Iran. Winfrey, well known to Oglesby and others at Stanford, offered me help in vehicle operating costs.

The real breakthrough, however, came when I met with Wolfram Drewes of the Pan American Union. On Wednesday, two days before our meeting, I had had an *epiphany* of sorts. As I was walking along a large grassed area near the Latin American Center, I suddenly knew how I wanted to approach my dissertation: I would focus on the impact of penetration roads, i.e., those into areas with as yet untapped agricultural potential. To do this, I needed detailed data on such investments. So, when I explained these ideas to Drewes, he smiled, went to his filing cabinet, and pulled out five thick volumes that contained the results of several years of studying agricultural development based on new road development on the eastern slopes of Peru. He apologized because they were written in Spanish. But I assured him that would not be a problem. When I asked about borrowing three of them for review and possible use, he hesitated saying, "That's something I don't do." But in the end, he agreed to loan them to me. Drewes suggested that I

might want to see Bill Thompson of the Organization of American States, which was in the same building. Bill, who was a transportation guy, was sold on his line of work, saying "*Transportation is the hand maiden of progress*." Fine, I was into transportation. But not as far as this guy. From about that time, I quickly lost confidence in anyone who was so focused that he thought his approach alone was the key to success. I left Washington, D.C. armed with the three volumes Drewes had loaned me confident that I was on the right track.

This was the idea: I would use the well known methods of engineering economy as a starting point in my critique of some case study. The data for that study could come from the Tango-Maria penetration road in Peru as written by Wolfram Drewes. I thought I would find areas in which his analysis had made procedural errors. These I would correct. I would reject the methods used in the USA and other advanced economies, which rely on traffic counts as a measure of benefits, because traffic in such areas is non-existent or minimal. So, I had to rely on other methods for measuring economic impact, which would be mainly increased agricultural output. I didn't think this alone could justify my dissertation. I would therefore rely other techniques such as shadow pricing as described by Jan Tinbergen. These are prices that reflect the real value of resources, not those found in the market place. Examples would include a controlled foreign exchange rate, which meant that the *real* value of foreign exchange was worth more than the official rate. Or, where large scale unemployment exists, the market wage overstates its real value. I also planned to show that an investment has effects beyond its direct impact. To show how that would emanate outward, say to the benefit of industries supplying inputs to the project, or to industries making use of project's outputs, I would use the input-output model developed by Leontif

To my knowledge, and to that of my committee, the application of these concepts had not been done before. The central idea was to use enlightened project analysis to select and evaluate projects as a means of promoting a country's growth. Such elaborate analyses were not needed for a country such as the United States, so my argument went, because our markets evaluate resources more or less accurately. Not so, for the LDCs, where competitive markets generally do not exist.

This approach would be a contribution to the state of the art regarding project evaluation. The only real problem I had was in the use of Leontif's input-output model. Normally, the input-output model works the other way around. That is, it goes from showing the effect of a change in the overall economy to individual industries. I got around this by using a study given to me by Prof. Boon called the semi-input-output method. In short, the approach assumes some of the farmers' output will be used by industry for further processing. These industries and those supplying the project with inputs create additional economic activity (i.e., indirect effects), and eventually allows an estimate of the increase in GNP. By knowing a project's impact on the whole economy, decision makers can choose investments that best satisfy a country's goals.

Now, with my approach clearly in mind, the main task was to go through the relevant literature, address the analytical issues, and write it up. But before I could start, I had to complete my responsibilities on the Spanish project. With that out of the way in May, I began what was a long, hard slog that went on for eleven months. By April, 1966 I had submitted drafts for committee review then turned my attention to the pending defense of thesis, which required not only what was in my dissertation, but theoretical concepts upon which it was based. While this was a grinding process, its upside for me was that I was working on a topic of my choosing and having the time to do it as well as I could. Also, I expected the final result would contribute to my career.

During these long months of work, I practically abandoned the family often leaving home before the children had risen and returning after they were in bed. The small, off-campus office SRI provided me was a windowless room with a filing cabinet, a desk, flat table, and a typewriter. At times when I was alone in the building at night, I would crawl onto the table, lie in a fetal position, and doze for half an hour. To counter the claustrophobic effects, I hung a travel poster of a beautiful Swiss mountain landscape. Throughout the process, Bill Sharpe's admonition kept ringing in my ears: there are two types of dissertations, good ones and bad ones. The good ones are either masterpieces, which are almost impossible to achieve or ones that are quick and short. All the rest are bad ones. I shot for the quick, short type. Producing a finished product in eleven

months, once I got started, might qualify as being short, although the final product ran to over 300 pages. By comparison one of my cohorts got his done in three months, and Steiner finished his in six months.

I defended my thesis in early May before Ray Linsley and Clark Oglesby of the Civil Engineering Department, Gerard Boon, Julius Margolis, an outstanding welfare economist with a joint appointment at Stanford and Berkeley, and Ruppenthal, a Business School professor specializing in transportation. To give me some insight as to what Ruppenthal might ask, I looked up his publications. To my surprise, though the list was long, most of the citations were compilations of others' work at symposia he had chaired, not original works of his own. Linsley, who chaired the exam, took considerable pressure off me at the outset by saying, "I hope you don't mind if I doze during the questioning. I was working late last night." What a beautiful way to ease my tension! My only real problem came from Margolis, who got after me about the shadow price of unskilled labor. Being a Chicago-type economist who believes in the efficiency of the market place, he was not about to accept Tinbergen's arguments that surplus unskilled labor was over-priced in the market. But then he and Boon got to arguing, while I sat back and listened. After about two hours, Linsley called a halt to the discussion, asked me to step out of the room while the committee reached a decision. Then shortly, he returned smiling and said, "Congratulations, you passed." I took the rest of that day off. The next day Vicky and I celebrated by first playing golf at the Stanford course then went out for dinner.

What now remained was to put the finishing touches on the draft, submit a copy to Linsley, Boon, and Oglesby for their comments and incorporate these into the final draft. Vicky came to my Stanford office off and on for the next two and a half months pounded away at an IBM Selectric with its backup correction bar to produce "mats" that, for major corrections required using a razor blade to scratch out the original letters, painting over the spot with correction fluid, typing the change, and making copies. Meanwhile, my parents took care of the kids. Towards the end, when we were sometimes working past midnight, my folks stayed overnight. Although we

only had three small bedrooms, it wasn't cramped because Vicky and I were spending so little time there.

Prof. Oglesby provided the most detailed review with comments that were largely editorial. On my chapter on sensitivity analysis ⁴ he wrote, "The writing here is very wordy," and "Your continued reference to such things as 'the assumptions of Figure VIII-2 make it almost impossible to follow your reasoning. Cannot the individual examples and the figures be made to stand on their own?" But then he goes on to say, "This chapter presents very important material. It alone justifies the dissertation. For this reason, clarity of expression becomes important." Prof. Boon wanted me to add some lines about unskilled labor. But, Prof. Linsley required only a few minor changes, which were consistent with his earlier statement, "It's important for you to finish up and get on with your career." He even made his secretary available towards the end in helping Vicky type the final draft. Later, he asked if I wished to teach an EEP course based on my dissertation. SRI objected, so I wasn't able to do this. I also received unsolicited job offers from Van der Tak of the World Bank and Drewes from the Pan American Union. Although I had a long-standing interest in working for the Bank, I turned down that offer because I felt obligated to SRI for having financed me for so long. The teaching offer from Linsley gave evidence that he liked what I had produced. Coming from the Department Head who had served as science advisor to President Johnson, puffed me up not just a little bit, which was a good thing because I was soon to be brought back down to earth after returning to SRI.

Floundering

With the foregoing accolades ringing in my ears, I returned to SRI in early September, four years after having started on the PhD program, eager to apply what I had learned. Recall, my

⁴ The is a procedure in project analysis that tests the "sensitivity" of an outcome to alternative estimates of important variables. For example, the procedure shows whether a project would go from acceptable to unacceptable from an increase in investment or operating costs or a decrease in revenues or project life. The result provides far more information about a project than if only single values are used. Apparently, little had been done on this topic at this time.

decision to obtain a PhD was taken following Bredo's advice about being qualified for work in the LDCs, not for the prestige of the PhD itself. But it wasn't long before I was brought up short, even though I had succeeded in getting SRI to change my title from *industrial economist* to *development economist*. I talked with a half-dozen of SRI higher-ups, tried promoting an SRI program based on my thesis, nearly got assigned to a project in Honduras, and eventually agreed to work on a data bank for the Amazon–an effort I soon found to be a looser because no boundaries had been set on what to collect. I gave a couple of presentations to SRI staff, led a seminar at Stanford, and wrote exploratory letters to those whom I thought might be interested. With Prof. Oglesby's prodding, I wrote a paper based on my dissertation, which I presented to the Highway Research Board in Wash, DC. I had agreed to a two year assignment in Benin City in western Nigeria. But the turmoil leading up to the Biafran conflict scuttled that possibility. So, after five months I seemed to be going nowhere. Then, SRI obtained a contract to send a five-member team to Ethiopia for two years. I was to be a member of that team.

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Chapter 5: Ethiopia, Part I

I learned about the Ethiopian project one day when Bill Bredo asked me to come to his second-floor office. By this time he was director of SRI's International Programs, the one who had advised me to get my PhD should I ever aspire to meaningful work in economic development. I had heard about SRI's interest in the AID-funded project in Ethiopia and let it be known that I might be interested. So, when I received his call, I was excited by the possibility. Several years earlier we had hosted Bredo in our home to talk about possibly sending me to Peshawar, Pakistan. But after seeing how young Paul was, had decided against it.

Once in his spacious office, adorned with artifacts from Asia and Africa, he told me about the project. In 1966 Ethiopia had been receiving abundant financial and technical help from many organizations, the United States Agency for International Development in Ethiopia (AID/E) being one of the largest of these. With the cold war going on, the United States felt it in its vital interests to establish its presence in the Horn of Africa, close to the Suez Canal and Middle Eastern Oil. Our government even had a "listening post" in Asmara in the northern province of Eritrea that was manned by U.S. military personnel. This mountainous country had never been conquered, except briefly by the Italians, its people numbering 25 million were fiercely independent and rural. They were a handsome lot, especially the Amharas with their light brown skin and slim-nosed European features had controlled the several other tribes for centuries and dated their lineage to the Queen of Sheba. Picture book stories tell of her encounter with King Solomon. Thus, they were a proud people ruled by Emperor Haile Selassie, called the Lion of Judah. Adding to the charm of the country is its music, unlike any I've ever hear elsewhere with its limited scale of notes. Even more intriguing is the jazz played by Ethiopian musicians residing in Europe. Besides all of the above, Ethiopia's preferred dish of enjera and wat is one-of-a-kind. Enjera is a pancake-like unleavened, sourdough bread made from tef (a love grass). Ethiopia is the only country in the world where this grain is the staple. Wat is a spicy stew made from lamb, beef, chicken, lentils, or other stock and seasoned with ground hot pepper known locally as beri beri. This concoction is served by ladling small amounts of the different types of wat onto an disc of enjera perhaps 18" across that rests on top a metal pan. It is eaten by hand by tearing off a small hunk of *enjera*, scooping up a mouthful of *wat*, and popping it into the

mouth. Soothing this spicy dish is a pleasant-tasting and slight alcoholic honey mead called *tej*–a drink dating back to biblical times.

The Ethiopian economy was overwhelmingly agricultural. Coffee is by far the major cash crop and accounts for half of the country's foreign exchange earnings. Some cotton is produced in the Awash Valley, part of the Rift Valley, which helps support the local textile industry run mostly by the Japanese. Historically the country had been isolated because of its remoteness. That, combined with its largely self-sufficient agriculture and the country's small industrial base, meant that Ethiopia's international trade as a percentage of its GNP has been among the lowest in the world.

With the international community concerned about the world's ability to feed itself, improving Ethiopia's agriculture became one of AID's primary objectives.

Our technical assistance project, amounting to two million dollars, was to provide input to the country's Third Five-Year Plan (TFYP) currently being written. Specifically, we were to provide what the Agency called bankable projects in agriculture. Since the planning process had already begun, the Agency was anxious for us to get to Ethiopia as soon as possible. In fact, when questions about agriculture came up, members of Ethiopia's Planning Commission would say, "Wait until the SRI team arrives."

Thus, the Agency exerted considerable pressure on SRI to field its team as quickly as possible. Having won the competitive bidding process, Bredo was urgently searching for suitable staff, that he hoped to place in Addis within the month. I told Bredo that I was interested, but would have to clear this with Vicky, since accepting would mean that we would live in Addis for two years, which meant taking three of our children out of school. Vicky readily agreed to the move, but balked when I told her that Bredo wanted our team to leave in two weeks. Returning to Bredo, he countered by suggesting that I leave in two weeks and Vicky could come on later with the children. She said no to that. In the end we settled on three weeks.

The team, all with PhDs, comprised two agricultural economists, one of whom would be the team leader, an industrial specialist, a rural sociologist, and a development economist. The team leader was to be Clancy Miller, an associate professor from the University of Nebraska who had received his PhD under John Kenneth Galbraith of Harvard. Clancy was perhaps five years older than I, slightly paunchy, avuncular, with a smile that combined friendliness and conceit. The other agricultural economist was to be Jerry Marousek, a professor from the University of

Idaho. The industrial specialist was Bill Schwarz, who had done his graduate work at the University of Kentucky. Ray Borton, was the sociologist. I was to be the development economist.

One problem soon cropped up. I was in Washington, D.C. to present a paper based on my dissertation. While there, I stopped in to see Al Cleveland, SRI's Washington representative. He said that Mr. Gotchall AID/Washington's desk officer for Ethiopia would like to meet me. Generally, each of the countries in which AID operates has such an officer to backstop operations in the field. The officer, together with his staff, looks after AID personnel assigned to the foreign post, provides information and conducts studies at the request of the Mission Director, handles accounting and budgeting matters, and manages the contracts with independent consultants, such as SRI. Included in this latter activity is the production of a project paper, usually done by an independent consultant, that justifies a technical assistance activity, prepares a list of qualified contractors, solicits bids to carry out the agreed upon activity, and monitors the contractor's progress, including oversight. Feeling confident of my recently acquired knowledge of the development process, I was glad to have this opportunity. Imagine my surprise when Gotchall quite bluntly wondered why I was a member of the team. Miller and Marousek were agricultural economists, Borton a sociologist with experience working with small-farmer groups, and Schwarz ... well, he did have industrial experience. But what was I to provide? In Gotchell's eyes, my international experience in Venezuela was in oil, my work to date with SRI, except for Spain, had been US-based, and my PhD was simply academic. What AID was looking for was someone with international experience in agriculture. After we left the building, Al, who knew the focus of my dissertation and the ins and outs of AID bureaucracy, said, "Don't worry. We'll redo your bio and resubmit it." That we did, and my appointment to the team was cleared based primarily on my

expertise in benefit-cost analysis, a topic that turned out to be central to the Ethiopian project.

Even with the extra week to get ready, Vicky and I were pressed for time. We had to go to San Francisco twice, once to get a yellow fever shot and another time to apply for our passports and visas. The bank of shots were intimidating: they included typhoid, tetanus, typhus, choler, plague, and a smallpox booster. Because of our children's young age their immunizations were given in two doses. To complete all these shots in such a short time, the children were given four shots at a time, which caused Paul and Mike to become delirious both nights. We had to clean the house and get it ready for rental and sell our car. We had to sort out our belongings, decide

which was to go into long-term storage, what we could store in our small attic, what to send by sea and by air and what to pack as accompanied luggage and as carry-ons.

Although pressed for time, we invited Bill Schwarz in for dinner. Bill was short, fat, and bald except for a dark fringe around the edges. His accent was Eastern, his mannerisms reminded me of Willy Loman in the Death of a Salesman. After Bill left, I recall telling Vicky, "Man, that guy sure does talk a lot." He had a way of saying, "When I was at Lex-ing-ton, Ken-tuc-ky" emphasizing each drawn-out syllable. We were destined to hear much more of this over the next two years. The last two nights before we left, we worked till 4:00 a.m. scarcely knowing what we were doing. Years later, when we cleared out the attic we found that we had stored a half-opened cereal box, as well as other items that could just as well been thrown away. But with the urgency in which we left and the hours we kept, it was a wonder we did as well as we did. So, on the morning of our departure when my parents came by to drive us to the airport, Vicky and I were in a daze.

In getting ready for this assignment, Vicky handled most of the packing and housing details while I prepared myself for the upcoming assignment. Bredo called several meetings with Miller, Schwarz, and me to plan what the three of us would do once we arrived in Addis. Marousek and Borton were to come later. Bredo would remain on-campus. Not all was drudgery. During one of our meetings we went to an up-scale restaurant along El Camino Real for drinks and lunch. And one evening Bredo and his wife hosted us in their richly appointed home in Woodside, off Sand Hill Road on the way to Portola Valley. The house had a mountain motif. Bredo's study was lined with books and studded, as was his office, with items he had collected overseas. We got to his house by driving up a winding gravel road for a quarter of a mile. Seeing how the Bredos lived with the exotic artifacts served as an exciting image of what those of us leaving for Ethiopia hoped to experience. During one of these meetings, shortly before we were to depart, Bredo warned us that our job might not be so easy. He said, "The Ethiopians can be difficult: they have been isolated throughout most of the country's history. It's mountainous terrain meant it was off most commercial routes, consequently, except for brief periods, had been free of Colonial domination. Having duly warned us, he wished us luck.

We changed planes at JFK where Vicky's father and his new wife, Bobby, Vicky's younger brother, and his family visited with us during the two hours between plane changes. We

arrived in Rome just after noon¹ and checked into a nice downtown hotel close to the Via Veneto. After a short nap, which soothed our scratchy eyes, we hailed a taxi and drove past the Colosseum, found the flower-adorned Spanish Steps, and had dinner at a small restaurant that fit our image of what a typical Italian restaurant must be like.

The next morning we took a bus tour that began at the Villa Borghese where we looked over some of Rome's famous seven hills, took in the Pantheon with its vaulted ceiling, wondered at the beauty of the Fountain of Trevi where tourists toss coins into the water for good luck, and ended at the magnificent St Peter's Basilica in the Vatican. We returned to our hotel with plenty of time for lunch, check out, and arrive at the airport for our 4:00 flight. Leery about the ways of Roman taxi drivers, we told our driver as we got in that we had plenty of time, hoping he would take the hint. Perhaps just in spite he gave us the ride of our lives, which seemed like it could be our last. The route we took was along a heavily traveled six-lane *undivided* highway. For most of the way he jockeyed in and out of traffic at 80 mph. What a relief to finally arrive safely and to board our flight to Athens three hours away.

Once we arrived in downtown Athens, Clancy said he'd like to see as many of the sites as possible while we waited for our late-night flight. So, we hired a taxi and were able to see the Pantheon, Olympic stadium with its gleaming white stone and surprisingly narrow dimensions, and up to Mt Olympus for a view of Athens' lights. As we got out at these several sights, I walked with Clancy, interested in getting to know better the guy I was destined to be working with for the next two years. This left Vicky with our four children, which I heard about later--justifiably so. By now, however, our family of six had learned to negotiate street crossings in which Becky looked after Paul and Tim after Mike with Vicky and me ready to take over if needed. While waiting at the airport terminal, we saw Harvey Dixon of SRI waiting for a plane headed back to the States. We also laid eyes on two Ethiopians, finding their appearance striking with their slender builds, light brown skin, straight noses, high sloping foreheads, and large eyes. Another rare occurrence happened as we walked the tarmac to our plane. Midway to the plane we met a TWA crew on its way to the terminal. One of the pilots looked vaguely familiar. So, we asked him his name. Turns out that it was the brother of our neighbor, William Wilder, who lived just across the street from us back home. We knew he was a TWA pilot who flew in and

¹ Such details do not come from memory, but from the log I've kept since I was told in college that competent engineers kept a record of their activities.

out of Europe. These two encounters gave us the feeling of how small the world can be, even though we were so far from home. Over the years in our many travels we often found someone whom we either knew directly, or indirectly via friendships.

We boarded the Ethiopian Airlines flight to Addis with a brief, early morning landing in Asmara, the capital of Eritrea. Eritrea has its own history, customs, and language (*Tigrinya*) and had enjoyed brief periods of independence over the years. During the late nineteenth century Italy colonized the area, lost it during the battle of Aduwa in 1896, regained the area during Mussolini's African adventures, then lost it again in 1941. The area was then administered by England on behalf of the UN, was federated with Ethiopia in 1952, and became one of Ethiopia's provinces in 1962. Vicky and I joined some of the passengers on the platform abutting the plane's boarding steps. As we take in the activities between the plane and the terminal, we notice our luggage being loaded on a trolley on its way to the terminal. We are nearly certain about this because of the large white crosses on the sides of the bags—a gimmick we learned when going to Spain. We hail an airlines official, who guides us down the steps and to the terminal where, after some convincing, we succeed in getting our bags loaded back on the plane. Who knows how long it would have taken to eventually recover them had they been unloaded there, or how we would have gotten along during the interim?

Typically, EAL flights had a TWA pilot who was first in command and co-piloted by an Ethiopian. In time, we were on flights in which the chief pilot was an Ethiopian, something that we became used to. The story made the rounds about what a huge jump it had been for these Ethiopians to become pilots, coming from a land where donkeys prevailed over even animal-drawn carts; and the people *did not even ride the donkeys, but trotted along side sometimes for twenty kilometers at a stretch!* (For some reason, perhaps due to the difficult terrain in many parts of the country, animal-drawn vehicles were uncommon.) The adjustment could not have been easy, when one considers youngsters in most countries learn to navigate on wheels at an early age, where leaning into a curve while riding a bicycle, for example, would be an experience foreign to Ethiopian youngsters. TWA's involvement came about through a long-term contract for general operations, maintenance, as well as piloting the planes. And the arrangement proved to be a good one given the airlines' reliable schedules and accident-free record. In time, we became good friends with some of the TWA pilots who were stationed in Addis through our Golf Club. Salyers, who was the Emperor's personal pilot, was one of them. Bob Moats was another, whose

wife Maxine often played golf with Vicky. Maxine would tell stories about playing bridge with Omar Sharif during Bob's previous assignment with TWA in Cairo.

Our approach to Addis took us over broad, flat plains, fields of newly emerging grain, and We exited the plane to a fresh morning, with a dazzling sun and clear, blue sky, thatched huts. and temperature in the low 70s. This delightful climate was a combination of being above 7,000 feet and nine degrees above the equator. To the north of us was the Entoto Range, to the west were eucalyptus-studded hills, and to the southeast the crater of a long-extinct volcano. As we were soon to learn we were in the midst of the dry season, when the weather is wonderful, especially when compared with the heavy, overcast days that accompany the "big rains" that start mid-June and last until mid-October. Even though this is the summer period, the temperature drops to a chilly 40°F; the locals consider this period their winter. I vividly recall the euphoria when the long rains stopped and we could look forward to the thin, blue sky, the balmy fresh air, and looking forward to the many months of fine weather and golf ahead. The end of the rains is celebrated by a parade involving the Emperor, high priests, the military, and veterans of past wars dressed in the cloaks and white jodhpurs some of whom are mounted on prancing white horses. The day is called Maskal day after the beautiful, yellow wild flower that blossoms throughout the highlands at this time of year. The country's tourism bureau boasts of 13 months of sunshine. How does this work? The Ethiopian calendar is made up of 12 months of 30 days each plus another month of only five days. So, the number of months is correct, but the impression of having sunshine all 13 months is a stretch.

The thousands of hectares of eucalyptus planted on the hills surround Addis play an important part in the local economy. The trees grow rapidly sending out shoots that increase the number of small trees emerging from a single planting. These saplings are allowed to grow for seven years, at which time they have developed into slender poles some three to four inches across. Stripped of its leaves and small branches, these poles form the principle source of building materials: studding, rafters, even scaffolding. The Ethiopians use the branches as firewood, as evidenced the pale of smoke hovering over the city at eventide; and they will stuff the leaves up their nostrils to clear the nose. After the harvest, the owners will wait for the areas two meters of annual rain to nourish the plants until they can be harvested another time. Subsequently, we did an analysis of this business activity and found it a good investment.

This city of 650,000 dotted with eucalyptus among the many thatched and corrugated iron covered huts looked more like an overgrown village than the capital of a country of 25 million people and the home of both the Economic Planning Commission for Africa and the fledgling African Union. Addis is also the center of the predominant and ruling Amharas. This ancient ethic group has roots dating back to the Queen of Sheba. The Emperor claims to be a direct descendent.

We cleared customs, claimed our luggage, and moved to the reception area where we find John Fischer waiting for us. He heads the agricultural unit and is our main contact with the AID Mission. Clancy recognizes John from a distance. They are both agricultural economists—John formerly of Montana State University and Clancy, as noted, from the University of Nebraska. They got to know each other through the annual meetings of the Agricultural Economics Association—It was because of this acquaintance that AID suggested, and SRI accepted, Clancy as team leader. John greets us with open arms; his bright, round, smiling face makes us all feel as though we were meeting a long-lost friend. He says, "Man, am I glad to see you guys. The Planning Commissioner, who's responsible for writing the country's five-year plan, keeps asking us to help them find suitable agricultural investments. And I have to keep telling him, 'What until the SRI team gets here.' So, the pressure's on you guys to get me off the hook!" This was not a threat. John didn't operate that way. He was just telling us in this off-handed way that he was glad we were here and was confident that we would do a good job.

John had been the Dean of Social Sciences at Bozeman and, relying on his excellent oratory skills, had gotten into state politics. Unfortunately for him he backed the losing candidate in the state governor's race—a position won by the person who was then president of Montana State University. With his ambition to greater things thwarted, at least temporarily, he left his position and took the AID job he now held.

John took us to his home on the outskirts of Addis. It was a simple, single-story building with plastered stone walls and lots of windows, set on an acre of land that included a small corral for John's horses. His wife, Jeannie, was a trim, pretty, motherly blond in her forties. With a beaming smile she welcomed us into their home. She quickly paired up our children with their three youngsters, who ranged in age from four to fourteen. Then, she set about preparing lunch for us, as she would continue to do for our children until we were settled. Already she had arranged

for Becky, Tim, and Mike to be enrolled in the American Community School located about a mile away.

From there, John took us to his office, located in downtown Addis. After introducing us to his immediate staff, John proceeds to brief us nonstop for the next two hours. John, in his upbeat manner repeatedly emphasized the timeliness of our project, that *now*, at this very moment Ethiopia is positioned to make great strides in agriculture and that it was incumbent upon us to take advantage of this unique opportunity. While he was making these assertions, I kept thinking to myself, "Why now? Why not some other time?" But I kept quiet and just listened and John never gave the reasons. This was just how he approached things. He championed AID's new agricultural emphasis as promoting *packages of practices*, as opposed to reliance on *single-input technology* currently coming out of agricultural research centers in the States. The idea was that a combination of improved seed, fertilizer, and cultivating practices produced higher yields that each of these adopted individually. This one made sense to us—a surprise, since AID/Washington often typically came up with some *idea of the year* along with a catchy acronym that would have little staying power.

John went on to briefed us on the Planning Commission, headed by His Excellency, Belay Abay, and the Technical Agency, headed by Ato Habte Ab. (*Ato* is Amharic² for mister and commonly used as polite form of address.) Although the Planning Commission was positioned just below that of a ministry, it's commissioner, Belay Abay, exerted considerable influence through his role of coordinating the various ministries' activities and his direct line of command with the Prime Minister. On the technical side, he received help from a cadre of advisors from different countries and organizations, including Harvard's International Advisory Group. Later, once the Plan went into effect, the activities of the Planning Commission were upgraded to the rank of Ministry, thereby making Belay Abay a minister. The Tech Agency, where our offices would be housed, was a branch within the Planning Commission. Its responsibilities included overseeing contracts such as ours, as well as carrying out studies of its own. Consequently, we would report to Habte Ab; and, because our contract was funded by an AID grant, we were also

² Amharic is the official language, while Gize is the language of the Coptic Church, much as Latin used to be for the Catholic Church; English is also commonly used among Government officials; and some Italian and Tigrinya are common in Eritrea and Tigre provinces.

obliged to keep John informed of our activities. In preparation the AID Mission had arranged that some of the Tech Agency staff would be assigned to us as counterparts.

Due to its strategic importance the AID Mission in Addis was probably the largest in Sub-Saharan Africa with perhaps 60 professional staff and support personnel doubling that. As was typical, a Director headed the Mission, a Deputy Director was second in command, and the Program Officer was third in rank. The Director wields consider influence through his close contacts with our Embassy, State Department entities such as the US Information Service, senior Ethiopian officials, and other embassies. An Administrative Office, sometimes a retired military officer, or someone of that type who plays by the rules, rides herd over day-to-day operations thereby freeing up the three top officers to pursue Mission objectives. Delaney, the Contracts Officer looks after legal matters. Both of the latter tend to be cold fish, and rightfully so; since they tend to get criticized whenever they make mistakes, but are seldom praised when things go right.

John Mossler, a friendly, easy-going sort, was the AID Director when we first arrived. He was soon followed by the intense Roger Ernst--a dynamo more akin to top corporate executive than a government bureaucrat. He had been transferred from the large AID mission in Thailand, presumably to shake up the AID mission in Ethiopia. His reputation, which preceded him as being tough to deal with, was soon borne out. During meetings he would fire off sharp, probing questions, chastising those who were unprepared. He let it be known that, because he thought AID's mission in Ethiopia was critical to US foreign policy, he planned on devoting the next six years of his life to get things done here. He was tall, trim, and almost handsome; he exuded energy, seemed to work all the time, and was a prodigious reader reminiscent of JFK's reputation. Although, Vicky said he had trouble keeping his hands to himself. His wife was a chick, nice-looking blond who appeared to ignore this proclivity with the "girls." The story was told that he had laid down specific budget targets that AID/Washington had to meet before he would accept this assignment. Undoubtedly, his self confidence came naturally. His father was one of President Roosevelt's personal lawyers. So, he must have grown up in a household frequented by powerful people, who influenced event and got what they wanted. As testimony to his stature, Roger filled in for the Ambassador during the latter's occasional absences. With such confidence, whether innate or acquired, Ernst was unique within the AID hierarch in that he did not cower to Congress as did many of the top-level officials in the various AID missions where I subsequently worked.

With his briefing out of the way, John took us to the Ras Hotel, a second rate affair, whose entrance crowed the sidewalk bordering Churchill Road. (*Ras* means king in Amharic.) This wide, paved but dusty avenue extended for some three kilometers from the railway station to City Hall next to the main shopping area known as the *Piazza*. John says he had hoped to get us into the more accommodating Hotel Ethiopia, but it was filled. That evening we searched out the hotel's dining room. This was a dingy, darkly lit place with only two of its many tables being occupied. Our waiter did his best to translate the items on the menu, but his English was limited and our Amharic absent. We ended up ordering something that tasted like liver—not a wise choice in a land where liver fluke among the cattle is widespread.

The next morning, with light streaming through the slits in our curtains, we awoke to the sounds of people on the sidewalk no more than five feet from our window, separated by only a short, iron picket fence and a patch of bare ground. Looking out, we saw what, later, was to become a familiar street scene, that is, barefoot men dressed in ragged pants and shirts with togas that looked like curtains (called *shammas*) covering their shoulders, women with braided black hair in gauzy dresses trimmed on the edges, and donkeys heavily laden with bags of grain headed for market, their owner trotting alongside. This gave us all a shock, especially for me. And I said to myself, "What have I gotten my family into? And for two years, no less!"

We stayed at the Ras for a week then moved into the Ghion, the only up-scale hotel in the country, except for those catering to the Arab world in Massawa, on the Red Sea. The Ghion was set in some ten acres of land with a spacious spring-fed swimming pool and the Emperor's stable of horses and only a few blocks from the AID office, below the Emperor's palace, and across the street from the headquarters of the Economic Planning Commission for Africa. Across the street was Maskal Square (more about this later). The desk clerk put us up in one of several cottages set among scattered eucalyptus trees located behind the main building. That night around 2:00 a.m. we heard a jiggling at our narrow bathroom window. We got up to see what was causing the noise then went back to bed. The next morning we found that someone had been trying to force out the window and sneak into the room. What a welcome to Ethiopia! But that was not all. Two days later the whole family came down with severe diarrhea. Our mistake was helping ourselves to ample servings from the noontime salad bar. We should have known better, but we had forgotten what it was like to be in third-world countries.

Why didn't John and the others in the Mission warn us? Or, what about SRI's or AID/Washington's briefings? There are two explanations, perhaps more. First, expatriates working in countries like Ethiopia routinely encounter brief episodes of dysentery, and so think little of it. Amebic dysentery is another matter, but far less prevalent. (In all the years we as a family had lived and traveled overseas, luckily none of us were so afflicted.) Second, in time one builds up an immunity to the bacteria causing the problem. In our case, the family recovered from the first bout of diarrhea within a few days by taking Lomatil. This commonly-used drug was quite effective, but is no longer recommended because it supposedly kills the good as well as the bad bacteria in the gut. Then, a month after we had moved out of the hotel, the problem reoccurred. Then again in a couple of months. And still again after four months, until our systems became adjusted to the foods we are and the liquids we drank. Even so, we boiled all of our household water for twenty minutes then filtered it. Vicky, with our housekeeper's help, rinsed all of the fresh vegetables we ate with a Clorox solution, as did the rest of the American community in Addis. Once, on an afternoon trip south of Addis while my parents were visiting, my father observed that I was eating the fresh tomatoes served to us at a roadside restaurant. So, he ate them too. By evening he had severe stomach cramps along with diarrhea. His stay with us was too short for him to build up the resistence we had; and I had failed to warn him just as others had failed to warn us. We also took Coloquin (a prophylactic) to guard against malaria, which was endemic below 5,000 feet. Although, we were safe enough in Addis, time was needed to build up immunity for the occasional trips we took to lower elevations. While we never hesitated in taking these pills because of the devastating nature of malaria, we were mindful that long-term usage (which applied to us) could be harmful to the eyes.

Prior to our arrival, Jean and John had made arrangements for Becky, Tim, and Mike to be enrolled in the American Community School. She fixed them lunches and chauffeured them to and from school and looked after them after school for the first few days, thus freeing up Vicky to attend to our domestic needs and me to get started with our project. Some male heads of household will take the time to help their wives with these things. But I didn't, partly because of my confidence in Vicky's competence in these matters and my penchant in wanting to get on with my job. In any case, these early days were disjointed as we recovered from jet lag, grew accustomed to our surroundings, and began house hunting, selecting household furniture, shopped for a VW station wagon for our family use, bought liability insurance, received gamma globulin shots (against amoebic dysentery not given before we left, and attended several welcoming parties. We didn't need a local bank account, since SRI deposited our monthly pay checks directly in our

bank in the States and AID/E would cash our dollar checks for our local currency needs. Our contract covered our house rental, utilities, and schooling costs directly, but not telephone charges. We argued about our rental allowance, after comparing what we had to pay for housing that didn't even come close to what AID/E personnel had, and about the degraded condition of AID furniture shown to us.

Of initial concern for Vicky and me was to get out of the Ghion as soon as possible. Hotel life is not for parents with four young, rambunctious children. This meant finding and renting suitable housing. Without knowing better John had one of his staff show us several available houses. What a shock to see how luxurious most of these houses were, John's and Jean's not withstanding! We saw five and six bedroom homes with four or more bathrooms, marble floors, chandeliers, set on two and three acre los. We soon found out that homes of this type were well beyond our contractual allowance. That was no problem for us; we didn't expect to live like this. In turn, what was then shown to us as being within the price limit was below our rather modest expectations. In frustration, we went to AID's Contract Officer, who seemed almost delighted in telling us, "Your primary contact is the Technical Agency. Go talk with them." (This Agency was to be our primary contact with the Ethiopian government and the location of our project offices.) This hardly seemed fair to us, since AID has housing contracts for all of its own staff and knows the local scene, whereas the Tech Agency seldom deals in such matters. Swallowing pride and hiding our disappointment, we went to Ato Asfaw Keskessa, the Administrative Officer who the Tech Agency had assigned to our project. He arranged for us to see a few places. Then, after seeing these, I begged out and asked Vicky to take over. Coming from Long Island, she was far shrewder at getting what she wanted than I. After several days of getting the run-around, Vicky said she wanted to go directly to the AID Director. But instead, she gained access to Carlos Nelson, the Deputy Director. Carlos, contrary to the first name, was not Latino, but a dark-skinned African American. He was tall, athletically built, handsome, and friendly. After politely listening to Vicky's account, he called in the Contract Officer saying, "I want you to find housing that satisfies this lady. I want it done soon Then report back to me as soon as you've satisfied her." How beautiful were those words!

Nelson's wife had sparkling eyes that revealed her intelligence; she was matronly, yet attractive; and had a reputation for voicing her opinions bluntly. So, Vicky and I were on the alert when she was introduced to us. Within minutes she told Vicky that she didn't think contract families with four children should take overseas assignments funded by AID because it cost the

government too much Vicky replied, "We have four children" and she replied, "Yes, I know!" We soon got used to her ways and grew to like her. Another time, she and I were talking about golf (Carlos played to a modest handicap) when she asked me if I would show her how to address the ball. "Sure," I said. She then backed up against me firmly, took her stance and waited for me to put my arms around both of hers to simulate the swing, which I did without hesitation. Others watching her ploy knew what she was up to and could scarcely suppressed their grins. Later, I realized that she had no interest in the game, but was testing how I would react to touching a black. What surprised many American blacks when they came to Ethiopia, especially during this period when the Civil Rights Movement was in full swing, was the response Ethiopians gave them. Some, but not all, American blacks came to Africa with the sense of "coming home" to their heritage, feeling the Ethiopians would greet that being "brothers." But the Ethiopians were unreceptive. As far as Vicky and I could tell, Ethiopians considered themselves a race apart from the rest of Africa and had even less in common with the blacks from the USA.

In ten days we were out of the Ghion and into a house contracted by the Military Advisory Assistance Group. MAAG, a US organization, was well-established in Ethiopia as an advisory group to Ethiopia's military, primarily its army but also to its small navy. The house was one of two set in a four-acre compound surrounded by a five-foot wall. We and our neighbor had common day and night guards to secure the area from petty thievery. The house wasn't much, but at least we were out of the hotel and the large lot gave our kids plenty of room to run around. It had only two bedrooms and a den, one bath, and a decent kitchen, living room, and dining room. Vicky and I took one of the bedrooms, put the three boys in the other, and gave Becky the windowless den, with its two large glass doors opening onto the hallway.

By the second evening, the houseboy who came with the place--a slender Ethiopian of about twenty who spoke little English--came to us with tears in his eyes. With him was an older fellow who explained that his friend, needed money to buy medicine for his sick mother who was in the hospital. As part of his plea, he said we could take the money out of his weekly wages. Vicky and I looked at each other, she more skeptical than I. Finally, I said, "This looks like a scam, but supposing it's not. It's not a lot of money. I'd rather be taken than have his mother go without the medicine she needs." So, we handed him the 25 birr (ten US dollars) he requested. It wasn't long before we learned that this was standard practice among the Ethiopians, not just household help. Our guards and caddies at the golf club we would soon join, even educated-looking professionals were all on the take.

One day, while relaxing over coffee in John's office, I told him about our houseboy hitting us up for money he needed to buy medicine for his sick mother. With a big grin on his face, John said, "Oh, they got to you so soon, did they? Welcome to Ethiopia!" He then went on to relate an experience that had happened to him. It went like this. About a year before we arrived in Addis, John and his family had only recently moved into their home across the street from the golf course and not far from the American Community School. It was an up-scale neighborhood, not rich enough for the embassy crowd, but still pleasant with large lots surrounded by wide open spaces. One Saturday afternoon, John heard a knock on the door. When he opened it he saw a well-dressed Ethiopia of about fifty who explained that he was one of John's neighbors two doors to the east. The neighbor apologized for not coming over earlier to introduced himself and welcoming him and his family to the neighborhood. John accepted the apology and invited him inside where they had a soft drink. (John was not much of a drinker; neither are most Ethiopians.) They had conversed for about half an hour, when the neighbor asked that if John were not too busy could he possibly to drive him to the Princess Tsehai Hospital, only a few minutes away. He said his car was being repaired and he had promised he would visit his wife who had been admitted to the hospital only recently. It wasn't serious, but she did need such care. Being the friendly guy that John is, he readily agreed. Once there the neighbor asked if John would mind waiting for him. He would be back soon and then they could return home. "This won't take more than five or ten minutes. Before long, the neighbor came back into the waiting room with a worried look on his face. "The doctor says my wife needs additional medicine and I left my billfold at home. Would you mind lending me 50 birr (about twenty US dollars)? I have the money at home so that I can pay you as soon as we return." Without thinking too much about it, John gave him the money. The neighbor then went back down the hall to his wife's room, expecting his neighbor to be right back. John waited and waited and waited. Finally, growing impatient, John asked at the reception desk. But, unfortunately, John had forgotten the fellow's name with the result that the receptionist couldn't help him. He finally gave up and went home. It turns out that this wasn't a neighbor at all, but a smooth con man!

Another incident occurred to an acting superintendent of the American Community School who was living temporarily in the Turman's house. One night around 11:00 p.m. our night guard knocked on his door saying that a friend of his was at the gate and wanted to talk with him. It was urgent. So, putting on a robe, since he had already gone to bed, he went to the door only to find that the extremely well-dressed person, who called himself Dr. Yohannes, was not someone he

knew. Instead, he said that he was a friend of a friend at the American Embassy. He, in fact, was with the Ethiopian Embassy and a former Ambassador to Yugoslavia. He proceeded to reel off the names of their mutual acquaintances at the Embassy and mentioned several of our neighbor's relatives. Dr. Yohannes went on to apologize again for disturbing him so late at night, but he had an urgent request. Tomorrow, his foreign-born wife had to make an emergency trip to Europe and needed money to pay for her ticket. Normally, he would have gone to his bank, but the next two days were national holidays and the banks would not be open. In spite of his reservations about this seemingly far-fetched story, our neighbor shelled out \$200. The Dr. thanked him profusely, said he would return the money as soon as the banks were open, and left. Never to be heard from again!

How do these Ethiopians get away with this? And why are we so easily conned? I suspect, but could be wrong, that many of these relatively well-educated (if not well-educated, certainly highly skillful) individuals, not being satisfied with employment offering few opportunities prefer to live by their wits. Besides, with so many gullible foreigners coming to their country, often for such short periods as was the case with our neighbor, they are plums just waiting to be picked. More than that, most of us foreigners were so much wealthier than our Ethiopian counterparts, that the damage to us from such losses pales by comparison to the benefits accruing to the Ethiopians. Perhaps another explanation comes from the fact that Ethiopia might be considered part of the Middle East, where intrigue is commonplace. Fleecing a gullibly foreigner has an intrinsic value of its own, quite apart from its monetary value.

Our caddies stole us blind. It was their custom to accompany us to our tee and then go down the fairway to wait at a point close to where our ball was expected to land. Once there, they often would rest sprawled on the ground until it was time for them to go to the ball. During this time some would rifle through the pockets of our golf bag, sometimes searching for golf balls, but more often for something more valuable. One foolish lady had put her diamond ring in the bag, which her caddy stole. Not very swift on his part, but a definite temptation. She eventually got it back and the caddy had to look for work elsewhere.

Vicky and I had better luck with our caddies, but only after we had weeded out some undesirable ones who kept hitting us up for extra money. The same 'ol story, "My mother is sick and I need money to buy her medicine. At one point, she told her caddy that she'd give him extra money, but he would have to work for it by looking after the two horses we kept for Becky and Tim.

After a successful first effort, he failed to show up. And that was the end of that. My caddy was a clean-cut, strapping fellow, who also put the touch on me. After several unsuccessful tries, I told him, "You having to beg for money is degrading. Instead, why don't you come to my office the next day and I'll try to find something for you to do." He never asked me again. Later, I learned that he was in the Ethiopian army and just caddied on his days off. Vicky had better luck. Mohammed, her caddy, was polite, relatively clean (considering their limited access to water), and dependable. He never asked for anything other than to work for her. Although quite and not prone to talk about himself or his family, Vicky learned that he was going to secondary school and had a relative working in Washington, D.C. He said he hoped to go see him sometime. Often spoken, we thought the possibility remote because those who caddied came from the lower income levels of a generally poor population. (More about this later.) At the outset being robbed, mostly of petty items, and continually being asked for money made our association with these fellows an unpleasant experience . . . until after a year or so we lightened up and treated this aspect of our relationship as a game. The caddies saw us as fair game; and, eventually we came to play along trying to outsmart them. Viewed in this way, we found that they were not offended by our counter moves to their requests, that is., "Come to my office and I'll put you work." It became a game to see who could outsmart whom. But some of the above events happened after we had been living in Addis for some time.

While all this was going on, John was seeing to it that we got on with our work. He took Clancy, Schwarz, and me to take a look at our offices and to meet Habte Ab and our counterparts. Our offices were to be on the top floor of a modest, yet modern three-story building overlooking a wide, circular intersection called the *Arat Kilo* (Fourth Kilometer). The Technical Agency was on the second floor. The first floor was a storage area that had once been a about a restaurant. To get to our offices we had to thread up several broad, concrete steps and thread our way past a half-dozen ragged youngsters, aged seven to twelve, who offered to shine our shoes. All in ragged clothes, some barefoot, some with runny noses and the small, Egyptian flies sucking moisture from their the corners of their eyes, nostril, and mouths. What a bother these insects were! Their presence was so light that they could be there without one's knowing it. With experience, we covered our mouths when inhaling after a sneeze or cough to keep from inhaling them. Long ago these urchins had grown accustomed to them as they begged with their sad faces and saying in broken English, "No mother, no father, give me money."

Later, we were to learn the story on these so-called "street boys" was that they came from the surrounding rural areas where their parents, unable to provide for them, sent them to Addis to get along as best they could. Generally, we did not give them money feeling that this would only encourage them to keep doing what they were doing. So, instead, after we had learned about a young social worker who would periodically go around the city to gather up those youngsters willing to come with him. The organization would then clean them up, give them a quick medical checkup that included checking and treating them for parasites, feed them, and offer them a place to stay at night. Seldom would they stay for long. But at least the health of many was improved, considering that perhaps forty percent had some for of health problem.

Further up the street, which stretched from Maskal Square (more about this later) was the American Embassy. This, our, embassy, was perhaps the most elaborate of all the embassies and was nestled among tall eucalyptus trees on acres of land. The main campus of Haile the Selassie University lie in between, with a branch of the University immediately across the street from us-which had its relevance. Within six weeks of our arrival in Addis, riots broke out. From our third-floor offices we could see the police, in riot gear, lined up in front of the large iron grill that served as the entrance to the campus. Throngs of students lined up on the other side began leaning against the gate. Soon, it gave way and the crowd streamed out into the streets. From our vantage point, we could watch the students sneaking down parking lot next to our building, the police approaching from around the corner. Because of the high walls, neither could see the other until they suddenly confronted each other. Then, clubs flew, the students took flight, and pandemonium prevailed. We were unsure what to do, wondering if the fighting would spill over into our building. It did not and peace eventually prevailed. But not until a few students were killed. Closer to home was an incident that occurred to an American member of our Golf Club (more about this later). This member was the Dean of the University's graduate school and a fine musician who had spent time in India and subsequently formed a jazz group that played his own renditions of popular Indian music. A truly talented guy who should have known better than to have been driving through the riot area when clearly warned not to go there. Ignoring the warming, he was caught up in the throngs of rioters and had a rock thrown through the windshield of his car that shattered his jawbone. Lying injured in his car he had to thrust his thumb against his upper palate to keep from choking to death. Meanwhile, two from the crowd opened the two front doors and rifled through his pants searching for his billfold. What a way for us to be introduced to this long-term assignment in Ethiopia.

Before leaving Menlo Park, we had been told that Ethiopians difficult people to deal with. Perhaps, this an example of what lie behind this remark. But, generally we did not find this to be true. Smile as the country folk wander across the street, not knowing city life; but frown and you might get a rock through your windshield. Never saw so many fights along the streets with fewer words of argument. Have driven down a city street seeing two Ethiopians standing on opposite sides of the street obviously disagreeing with each other, then soon each would be flinging rocks at each other (a common means of attack) and in some case would soon be trading blows. Yet, smile and they small back; talk softly; slit throats on EAL; Salyers quit because of the threat

Ato Habte Ab, the Tech Agency's Director General welcomed us cordially, invited us into his office, and offered us sweet tea, which came in glass cups or demi-tasses of rich, strong coffee for which Ethiopia is famous. He was a man in his fifties, experienced in government affairs, crafty, and comfortable in this position, which he had held for many years. Clancy paid him close attention, since he would be reporting to him on a regular basis, while also keeping John appraised of what we were doing. Even though AID was providing the funds for our contract through the State Department, the Ethiopians felt that they had a vital interest in what we did, not only because the Five-Year Plan was dependent on our findings, but because the Ethiopians were paying for counterpart salaries, office space and utilities, local transport, general supplies, and some other costs.

Since our project was to occupy such a large proportion of Tech Agency's responsibilities, Habte Ab assigned a good portion of his limited staff to our project. The idea behind this counterpart arrangement was to help our expatriate team directly by linking us with those who knew Ethiopian conditions as well as to provide on-the-job training for the counterparts. Among those to be assigned was one who did not need such training. He was Dr. Duri Mohammad, an economics professor on loan from the University. He was tall and slender, perhaps of Somali linage, with a pleasant smile, cooperative, competent, and in his forties. Kifle Mariam, another economist, came from Eritrea. He was short, moderately plump, and in his thirties. His skin was fairer than the average Ethiopian with pink chubby cheeks that probably revealed an Italian somewhere in his family tree. Ato Asfaw, as already noted, was to be our Administrative Officer. He was of medium height, sturdy, perhaps forty, and had the dark complexion of the Gurages, one of the several tribes that make up Ethiopia's complex society. The Gurages are noted for their business interests and shrewd bargaining skills. These characteristics showed up in the way he advised us in our personal matters, when it came to obtaining our autos, insurance, housing, as well as our project

purchases. We were never quite sure to what extent he was acting on behalf of our project, the Government of Ethiopia, or himself. In time, we came to believe that his loyalties were to himself, so that we came to rely upon him less and less. A fourth individual was John Asfaw, a scrawny, dark-skinned Ethiopian who came from wealth, probably with links to the royal family, who, in the end did not have a college degree as we had expected, yet proved to be extremely effective. No snob John Asfaw. He worked hard and modestly made scant mention of his family background. He once told us about a time when he was working for Mitchell-Cotts, a British agricultural firm operating a cotton plantation in the Awash Valley that, being thirsty, he drank directly from the muddy Awash River without suffering any ill effects.

Finally, we met Commodore Rowse, a holdover from the days when the British administered the country. Whether he once held this rank, we never found out because we didn't ask and he didn't elaborate. He seemed to be an occasional, informal advisor to Habte Ab, whether wanted or not This elderly gentleman was charming, of the type one might have found in colonial India. He seemed to have been in the country forever and delighted in saying in his British accent, "Get along you Abyssinians." I think his intent in chiding his many Ethiopian friends in this manner was his way of saying, "Break out of your ancient ways and join the modern world." He delighted in recounting tales from the "old days" when explorers walked on foot through the Awash Valley and into the Danikel Depression. Occasionally we relied on him to advise us about local customs and practices. Otherwise, he played no part in our project. That was the extent of our introductions. We would eventually have other counterparts assigned to us, who would come not only from the Tech Agency but from other Ethiopian organizations as well as from the Peace Corps.

Important among the others within the Tech Agency were two Yugoslavians. These two were funded as part of the considerable technical and financial support by their government. This help resulted from the long-standing friendship between Haile Selassie and Broz Tito. The bond between these two came from their war-time resistance to foreign aggression and their adroit stands against strong, unruly groups within their own countries. Consequently, any number of Yugoslavs had held influential advisory positions in key ministries for many years. I met one of them days later while standing on the curbside outside our office. He introduced himself in his heavy East European accent saying his name was Harkolovich. Just that. No first name or title. Simply, Harkolovich. He told me what a pleasure it was for him to be in Ethiopia over the past five years. At that time, so early in our stay, I thought this sounded like an eternity. Part of what he enjoyed about being here, was the opportunity to hunt wild animals. Rather appalling was his description

of downing an antelope, cutting through its rib cage, ripping out the heart, and eating it while it was still warm, blood dripping from his chin! But then maybe this was just a tall tale he used to startle me—this young, innocent from the States. In time, I developed close friendships with two advisors. They both had relatives in the States and admired our freedom and competitive economy. We eventually grew to understand these feelings when we learned that Yugoslavia practiced its own brand of communism whereby much greater decision making authority rested with local authorities, rather than with the central government. But some of the other Yugoslavs were more difficult for us to deal with, in that they traded on their long-held ties with top government officials, had formed rather rigid positions on how Ethiopia should develop, and were committed to communistic-type planning.

Besides our contacts with AID, the Tech Agency, and the Planning Commission, two other individuals were soon to become important to our project. They were Jack Dalton and Jerry Dekker from the Economic Planning Commission for Africa (ECA). Both had been in Addis for several years, had somehow been allowed to concentrate their efforts on Ethiopia, as opposed to elsewhere in Africa, and had developed a close working relationship with Belay Abay once work on the Third Five-Year Plan had gotten underway. These two close friends were practically sitting on the Agency's doorstep waiting for our arrival. Dalton was a different sort of guy. He was a middle-aged hippie who had studied Marxist economics at the University of San Francisco, had divorced his wife, leaving her with their five children, then left for West Africa where he hoped to put Marxism into practice. But after a year there he grew disenchanted with the idea believing that agriculture, not Marxist theory, offered the greatest opportunities for improving the lot of most Africans. So, he quit what he was doing and spent the next year where he was learning all he could about the technical side of agriculture. When he thought he had learned enough he applied to the ECA in Addis and was accepted. During the years before our arrival, Dalton, along with Dekker, had spent enough time in Ethiopia to have learned much about the country and to have developed close contacts with key Ethiopian officials, particularly Belay Abay. Dalton saw our SRI project, with its cadre of professionals, as being just what the country needed, and was anxious to help us in any way he could. Most importantly, he and Gerry had followed the work of other groups, such as the World Bank, which meant they could quickly bring us up to date on the current scene and point to agricultural opportunities with the greatest potential.

Though strongly motivated professionally, Dalton retained some of his former mannerisms. He took up with a fun-loving half-cast from Trinidad who also worked at the ECA and moved into a

large, ramshackle home in an unpretentious neighborhood. They were fond of throwing parties in which they would invite a mixed crowd of long haired youngsters, senior Ethiopian officials, and friends from the Planning Commission. They would roll up the rugs, push back the furniture, turn up the volume for their favorite music that was mostly "high life" from West Africa and the Caribbean, and dance with the lights turned down low till the wee hours of the morning. A night would not go by without playing Dalton's favorite, *Guantanamero*, several times over. Often one could see Belay Abay and a few other senior government officials off in a corner talking politics. Vicky and I attended these gatherings a few times, usually leaving after a couple of hours. She was not overly fond of Jack saying he gave her the impression that he thought she was holding me back from becoming more involved in Ethiopia than I otherwise might have been. She also felt that she reminded Jack of his first wife. Once, when we had Jack and a couple of others over for a working lunch, Vicky served creamed chicken on toast—a favorite of mine. When he saw it, Jack grimaced then said sardonically, "Ah, chicken a-la-king. That's how you get rid of leftovers!" Vicky swallowed her displeasure, but that sealed it with Dalton as far as she was concerned. Even so, I continued to work with Dalton finding him both interesting and helpful.

Jerry Dekker was quite the opposite of Dalton: quiet, thoughtful, and, although of about the same age, gave the impression of being much older. His hair was turning gray and he would often puff on his pipe while pondering how he might answer a question. He was an economist who specialized in livestock. The Dutch government has long been active in economic development momentarily and through technical assistance. Of the industrialized countries, Holland's financial contributions rank among the top as a percentage of its GNP. Consequently, Jerry's background was more orthodox than Dalton's making his entry into the field of economic development easier. Besides these two advantages. His wife, who accompanied him, was a missionary doctor who worked at the leprosarium near us on Jimma Road.

Being one of the poorer countries of the world, it not uncommon for us to encounter beggars on street corners some of whom were lepers. Typically, they would thrust their bandaged hands toward you as they pleaded for small change, sometimes revealing only stumps of fingers; or, sometimes with no fingers at all. A truly heart rendering sight. Yet often, as the sun was setting, we would see these same beggars jauntily walking across our golf course, crutches across their shoulders, and talking with each other as though they didn't have a care in the world. There was no doubt that they had were leprous and slowly losing body parts, certainly to be pitied and perhaps

helped. But, the leprosarium was taking good care of them so that they didn't need to beg on the streets. Yet, who could blame them for doing so?

Regarding the Third Five-Year Plan, the Planning Commission was pressing ahead at full speed, which included night sessions that sometimes lasted till midnight. The planning approach was that favored by the World Bank.³ The Plan identified the country's national goals, appraised its natural and human resources, advantages, and problems, chose a development strategy, set sectoral targets, then fleshed these out with projects, policies and institutional support. The strategy chosen relied on commercial agriculture, which explains the contract awarded to SRI.

Consequently, the Planning Commission backed by AID, expected us to identify a sufficient number of "bankable" projects to "fill out" the Plan. The measures of a project's attractiveness depended importantly on its rate of return, first, from the national perspective (does the country adequately benefit from the project) and from the private perspective (are those in this sector be willing to invest). Our approach was to first familiarize ourselves with the opportunities within the country and then select a dozen or so of them for detailed study, stopping short of a full-fledged analysis of feasibility. Because of my PhD, I was ready to take a key role in evaluating the feasibility of an array of projects uncovered by those with expertise in agriculture. I hit upon an approach called *pre-feasibility* analysis, which relied on *order-of-magnitude* values of profitability, rather than detailed and lengthy studies of the type required of full-fledged *feasibility*. The former could be obtained by looking generally at markets, input availability, and approximate estimates of costs and benefits. This information would allow preliminary estimates of profitability sufficient to separate "good" projects from "bad" ones. Then, with a set of "good" projects in hand, the government could seek Bank support in financing key infrastructural needs and private support in financing commercial ventures. John and Habte Ab bought into this approach.

Shortly after our small team had gotten established, Habte Ab asked me to see him in his office. The Agency had received an assignment from the Planning Commission concerning tariffs on imports and he asked if I could find time to look at the issue. When I said I would, he gave me the write-up from the Planning Commission. We soon found out that, although our project was large and important for the Five-Year Plan, the Agency had other responsibilities; and because of its

³ For example, see Albert Waterston's Development Planning, 1965, Johns Hopkins Press.

limited staff, it would frequently turn to us. I learned an important lesson here, which came to a head at the end of our project: no matter how much we had helped the Agency in matters unrelated to our contract, we were still expected to fully comply with the letter of our contract.

But back to this request from Habte Ab. A short while after I had returned my written response, he phoned asking me to come to his office. There, sitting across from him was the other Yugoslav advisor whom I had not yet met. Habte Ab motioned me to take a seat He then read some words from my report then turned to the Yugoslav and said, "Since you don't agree with what Dr. Shaner has written, what do you have to say to him?" I was surprised to be challenged in this way, but defended my position as best I could. Thus, I was introduced to the Ethiopian character: probing, open to dispassionate debate, and occasionally confrontational, but respectful. Recall that the Ethiopians, although invaded, had never been subjugated; consequently, they do not show the distrust and evasiveness towards foreigners that one sometimes finds when working in countries that had been colonized. Kenya comes to mind. This brief encounter reinforced my admiration for the Ethiopians.

Even though the above experience was not unlike situations I've encounter at home, such as at Harvard or SRI, there were other aspects of Ethiopian culture that were unlike ours. One of these, which Rowse alerted us to, was called "wax and gold." Should an Ethiopian feel uncomfortable in a situation, or in a weakened position, he might resort to speaking in ways that had double meaning. Thus, the speaker might say something that would appear as flattering or innocuous, yet be insulting. We once heard a driver who had stopped at a street sign lean out the window and ask the driver in the car next to him who had just cut him off ask in what appeared to be a polite manner, "Who's your father?" In our Deep South the one asking such a question could be exploring the possibilities for a common background or family association. But in Ethiopia it was equivalent to calling the guy a *bastard*, suggesting the receiver didn't know who his father was. Thus, while things on the surface could appear straightforward, one had to consider hidden meanings—to the point we would ask, "What did he mean by that?"

One noon hour when I was taking a walk up the street from our office, I was approached by a man of fifty with somewhat soiled clothes, but not out of keeping with what many working types wore. He asked if I had change for a ten birr note. I immediately was on my guard. But then I thought, "What can be wrong with this?" So, I said, "Ishi" (yes in Amharic), pulled out my billfold, and gave him ten ones. Carefully, I put my hand on his ten-birr note while at the same

time extending to him the ten ones with my other hand. We quickly made the exchange. Then, as I was putting his ten into my billfold, he said, "Wait, you only gave me *seven* ones. Here, see!" Then he shoved the seven back into my hand. Incredulously, I saw only the seven ones he gave back to me! "Give me back my ten," he shouted. In the confusion, I did. And quickly cross the street he went. Still stunned, I said to myself, "That was a good trick. I wonder how did he did it? Somehow, the three birr must have gone up his sleeve, while I was focused on my billfold." The amount was trivial, but the *insult* was annoying. I started after him. But by then he was too far away for me to catch him. Then, I thought to myself. "Damn, caught again!"

The early efforts of our small team centered on writing our plan of work for the next two years. Clancy was to write about the big picture and how our focus on agriculture meshed with the Planning Commission's Five-Year Plan; Schwarz was to write about agricultural industries, such as fertilizer use, seed production, and the leather tanning. And I was to develop our procedures for identifying and evaluating projects, as well as identifying regional development possibilities.

It didn't take me long to get cross-wise with these other two. Neither seemed to be taking his assignment seriously as revealed by the lack of meaningful progress and frequent absences from the office. Even when in the office, Clancy would keep his door closed; and when we knocked, we would have to wait before he would invite us in. Upon approaching his desk, we could see a red blotch in the middle of his forehead—a clear sign that he had been resting with his head on his desk. To be generous, Clancy might have had medical problems, except that he exhibited good health in other ways. Moreover, I was amazed at Clancy's inability to write! His drafts, which Bill and I reviewed, lacked organization. For instance, his short section on the Ethiopian economy made no mention of the country's gross national product, which is a standard starting point for most analyses of an economy, although he did mention agricultural's contribution to the overall economy, and he listed public expenditures on agriculture in the section on industry. Moreover, his sentence structure was poor; and portions of his writing were downright puzzling. I thought to myself, "How could this be for someone with his background?" Later, as we got more into our project, Clancy's inability to write showed up again. It wasn't until his wife, Phyllis, arrived that his writing dramatically improved. This, and the hours he spent away from the office made us suspect that *she* was the one who could write, and probably was responsible for getting him through Harvard. But how could this be, given his major professor being the renown Kenneth Galbraith and his position as associate professor at the University of Nebraska? ⁴

When I confronted him with my criticisms of what he had written, he simply said, "You're too critical." I might have accepted the legitimacy of this response, had it not been for his nonchalance toward his job and his ill-disguised disdain for the Ethiopians. He gave me the impression that he considered our Ethiopian associations backward, as was their country, and that we being so much superior had a free ride for the next two years. Making matters worse, neither Clancy nor Schwarz seemed to appreciate the relevance for a developing country like Ethiopia of issues such as alternative development strategies, the relevance of imports and exports, or problems of unemployment and investment shortages. But then, my dissertation had focused on these topics, so I was undoubtedly more aware of them than others might be-perhaps excessively so. Even so, I thought they ought to be more cognizant about such matters. Besides that I judged the few pages that Schwarz had produced were minimal and unimaginative. But the real surprise came when John informed us that Schwarz did not have his PhD. Not that a PhD is so critical to this job, but he had been passing himself off as Dr. Schwarz. He had what is commonly called an ABD (all but dissertation). Now, this might not seem like a big thing, since he probably had completed his graduate courses and passed his initial exams. But, the world is full of ABDs. Some have writer's block, others look at the dissertation as an insurmountable obstacle, get diverted or grow impatient. There's lots of excuses. The simple fact is that an ABD is not held in high esteem, and *certainly* does not justify passing oneself off as having completed all of the PhD requirements. So, we had a problem on our hands. In time Schwarz came to be even more of a disappointment. I think at the heart of my consternation was my previous exposure to the outstanding work and abilities of those at SRI, such as Sherm Clark, Bill Sharpe, and John Hueneke, not to mention the superb quality of SRI's upper management Why did Bredo choose these two? Perhaps he had been desperate to find anyone who would be willing to spend two years in mystical Ethiopia. Sure, Clancy and John were connected. But where did Schwarz come from?

⁴ In hindsight, the fact that Clancy, who could have been in his early fifties, had spent much of his career at a major university without attaining the rank of full professor and was willing to give up tenure should have put us on the alert. But then, I didn't know as much about academia as I do now.

After several weeks of struggling with my disappointment over these two and pondering what to do, I went to John's home one day after work. Thinking John would appreciate my concern, I said, "John, I think our project's headed for trouble. I've lost confidence in Clancy as our leader." John listened, nodded, and appeared to appreciate my concern, while keeping his own counsel. Not long thereafter I received a shocking long-distance call from Bredo. He said I was clearly out of order, implying none too subtly that if I couldn't adapt to the situation Clancy would remain and I would go. Thus chastised, I retrenched, and did my best to make something out of a bad situation. I had thought that being part of SRI gave me some influence with Bredo and an advantage over Clancy. But it didn't. As I told Clancy, "I had never seen an SRI report so poorly written. Eventually after things cooled down Bredo appointed me Deputy Project Leader. So, I weathered this storm. And I learned a lesson: challenging authority can be dangerous.

By mid-June Vicky, with Carlos's help, was able to find a suitable house for us right on the main road to Jimma, the coffee capitol of Ethiopia. Being on a main road, the compound had a large, iron-grilled gate and a high wall with glass shards on top. As with our first house, we shared a common compound with its daytime and nighttime guards. This time the others were an AID family from Puyallup, Washington–Jim and Irene Turman with their teen-age boy and girl. While we were quite happy with the house's three bedrooms and two baths, the accommodations for the Turmans, which mirrored ours, must have been a disappointment for them, since they were well below those of most AID professionals, although, I never heard them complain. Perhaps their relatively short time with AID explained why they were having to share a compound with a contracting family. While living there, we once waved to and received a wave in return from Reza Pahlavi, the Shah of Iran, as he passed by in his motorcade.

In July the other two members of our team arrived. Ray Borton, the rural sociologist with a PhD from Montana State University, had experience working with American Indian tribes of the West. It was there that John got to know him and his Dutch-born wife, Verana. Ray was slightly over thirty and a true professional: bright, modest, and friendly; a good listener and quick to pick up local customs and the Amharic language.. He was trim and sturdy, without any suggestion of athleticism, however. Ray's credentials were excellent having worked with the Agricultural Development Council, a Rockefeller-backed organization headquartered in New York City. The Council's executive director at the time was Arthur Mosher. Funded by the Ford Foundation, he had just published *Getting Agriculture Moving*, a text for countries "at early stages of agricultural development." While with the Council Ray also got to know Clifford Wharton, who among many

things was to become the Chancellor of the State University of New York System. As impressive as Ray's credentials were, before their arrival John raved even more over Verana. While she held no official position within our project, she helped Ray in his work, as well as being the perfect hostess to both the Ethiopians and the expatriate community. Almost immediately Ray set about designing, and later implementing, an extensive rural survey of nearby farmers. In time, I learned that this is what rural sociologists do. More than any of us, Ray and Verana melded into the local society: he through his work with the farmers, she through her work with welfare groups, and both by working on their language skills. Before long, we grew accustomed to hearing Ray's *ou*, the word for yes said softly by inhaling as the word was pronounced—not a common way of speaking for most. By contrast, the first word Vicky and I learned was *niellem*, Amharic for no, which says something about the culture.

The fifth and final member of our expatriate team was Jerry Marousek, a tenured, full professor of agricultural economics from the University of Idaho. Jerry was a raw-boned, rugged looking individual, perhaps 35, while exuding a certain meanness. While Jerry knew his economics, it was US related; he knew little about economics of development, nor did he care. As might be anticipated he did not relate well to the Ethiopians; in fact he had disdain for many of them. One day, after he had become established, we heard him bawl out his *zabanya* (house guard) for sweeping their driveway so much that he was wearing out too many brooms! But this was in character, considering that he happily told the world that his only reason for coming to Ethiopia was for the money. Jerry, had an aggressive, in-your-face manner, while also having a rye sense of humor suggesting he did not always take himself seriously. He was quick to pick up on Clancy's character and reacted by sitting at his desk and deliberately looking off into space or reading a economics journal or something else having little to do with our project. When Vicky chastise him once, saying, "Jerry, you're acting like a spoiled brat when you give up trying to contribute to the project." His response, "Why should I exert myself when the team leader, who makes more than I do, sleeps on the job?" His wife, by contrast, was simply sweet, soft-spoken, and a good mother who loved her husband. Strangely, Vicky and I were to exchange Christmas cards with the Marouseks long after leaving Ethiopia. But Jerry and I learned to get along, although he often tried my patience.

So what I had as team mates were three who I thought were largely misfits and one good guy. None of them had ever worked for SRI before. Thus, one of AID's common complaints seemed justified. That is, once a contractor wins a bid by presenting its international experience

and seasoned staff, the sometimes renown staff will suddenly become unavailable and the contractor resorts to those outside its own organization. Filling the positions as best it could. AID tries to guard against this practice, but then after complaining often caves in as the implementation deadline draws near.

I think part of the problem at this stage of AID's activities was its reliance on the faculty expertise of Land-Grant schools in the USA. These schools' outstanding success in agricultural research and extension, and the resulting production in our country, was thought to carry over with little alteration to third-world conditions. Thus, the reliance on Clancy to head up the project and Marouseks to cover agricultural economics. Typically, such professionals are specialists in a relatively narrow field based on *reductionism*--a scientific approach developed over the years that concentrates more and more on less and less. The approach works well when society is sophisticated enough to know how to bring the diverse parts together productively. But such integrating capabilities are seldom present in the developing countries, nor is the high level of scientific development always appropriate. Compounding the problem is the hubris of these professionals because of the status they enjoy "back home." That, coupled with the belief that the locals simply aren't very smart, otherwise they would not be living and working in a poor country. Fortunately, such naivete on the part of recent arrivals is soon lost as they eventually wise up to the reality that brilliance resides among individuals everywhere and that the problems of developing countries are complex, having to do with a lack of suitable resources, institutions, and economic incentives. The Dutch and the Swedes, for example, tend to be better prepared to help the developing countries than we from the States, probably because the smallness of their countries have forced them to look beyond their shores rather than internally as we tend to do.

With our full team on-board, the work plan out of the way, and having reconciled, at least temporarily, our most striking differences, we settled into our jobs. Clancy looked after overall contractual matters and general administration, such as authorizing and keeping track of expenditures, managing support staff, and periodically keeping our Ethiopian contacts, AID officials, and Bredo appraised of our progress. Ato Asfaw helped out with some of the administrative work and the rest of us provided Clancy with periodic progress reports. Ray Borton devoted much of his time to the sociological survey, as already noted. Marouseks, Schwarz, and I were left to look after the short-term specialists whom we brought in to identify "bankable" projects. The job for the three of us began with a general survey of agriculture and investment opportunities, writing job description for the short-term consultants who were responsible for

specific agricultural topics and investment possibilities, work with these consultants once they arrived, review their reports, backstop them during their presentations to the Planning Commission and AID, and follow up as necessary. For instance, Clancy's two consultants studied grains and pulses, Jerry's studied the livestock industry and leather tanning, Schwarz's studied the investment climate and export trade, Ray's studied the oilseeds industry, and mine studied irrigation, as well as implemented what they called the Resources Allocation Model, or RAM for short. RAM was a mathematician's approach to economic development, which bordered on the absurd. In addition to these studies, each of us played only a modest role for those consultants requiring little supervision from us. These included agricultural studies on fertilizers, chemicals, credit, and marketing, as well as a investigation of the potential for large-scale feedlots.

Most of our association with these consultants turned out well. But the one from New Jersey, who was to look into the marketing of fresh fruits and vegetables, would have been humorous, had it not been a fiasco. Vicky and I met him at the airport, showed him around town, took him out to dinner, then deposited him in one of Addis's better hotels. The next morning when he showed up to work, he had turned an ashen pale talking about seeing all the people "running around town with sheets over the head." True, Ethiopian men and women often carried a light shawl that they used to cover their heads—the women in the form of fashionable dress and the men as protection from the dust and sun. The next morning when our driver, Haile Mariam, went to pick him up, he found that he had left on the earliest plane. The strangeness of Addis was just too much of a shock for someone who had never left the States before.

Finally, with our responsibilities fairly well established the five of us settled to a regular 8:00 to 5:00 routine with a 90-minute lunch break, except when the consultants under our responsibility required special attention.. The Government started an hour later, but had no formal lunch break and worked till 1:00 on Saturdays. Clancy, Schwarz, and Marouseks felt that a forty-hour work week was all they signed up to do, so refused to work Saturday mornings, somehow overlooking the half-hour longer lunch break. Ignoring their stand on this issue, but not arguing with them, I came in on Saturdays feeling it important to be available should any of our Ethiopian associates want to talk about our project. Ray marched to his own drum beat so worked the hours he thought necessary, which undoubtedly exceeded forty. Because we lived several miles from our office, Clancy arranged for a driver to chauffeur us between home and work each day, including the lunch break. Our driver was Haile Mariam, a pleasant Ethiopian in his thirties with a crooked grin who had previously driven for the British Embassy. As with most Ethiopians, he was slender. He

was so shy that he seemed embarrassed to even look at us; instead, he looked at the ground in front of him with a voice was so soft that we could scarcely make out what he was saying. Nevertheless, he was a good, dependable driver. Although vehicular traffic in Addis was light necessitating a single stop light, Haile Mariam's job was not easy because he had to operate a rundown Chevy with a right-hand drive—a holdover from the time when the British were there and traffic flowed on the lefthand side of the road.

It was typical during our travels back and forth and while waiting for one of our group to get to the car to have Schwarz expound on some topic. As I had noted, and now we all did, he was quite a talker. His knowledge seemed vast, and on so many topics! And we were impressed . . . until we finally caught on. Bill was not that knowledgeable at all. What he had done, while the rest of us were working, was to grab Time magazine when it first came in. And while we were working, he literally leaned back in his chair to peruse the latest issue. All he was doing was telling us what he had just read. No problem with this, if it weren't for the fact that he made it sound as though *he* were the source of the information, not Time magazine. During one of our rides Schwarz talked about how we were all exposed to the threat of hepatitis just by living in Ethiopia. He talked about how the liver gets infected and swells causing considerable discomfort that might lead to sclerosis of the liver, and even death. Part of the cure involves lying still for a considerable length of time, or so he said. Ironically, the only one who contracted the disease was Schwarz about three months later. It wasn't life threatening, but he was out of the office for five weeks and we can only assume that he spent much of this time in bed. We didn't check.

While our daily lives were much as they would be at home, other aspects were different. For example, one day I saw Schwarz gazing out the window that faced the large traffic circle in front of our office. With an amused grin on his face, he said to me. "Come here. Look down there. What do you see?" Following his gaze, I saw a young woman walking stark naked on the sidewalk that adjoined the circle. The strangest of all was that the many people who passed her paid little attention, as though this were a normal event. And yet it wasn't. Although, there was a well-known mentally disturbed young man who would walk along the side of the road also totally naked. Occasionally, he would thump the side of a slow-moving car with his hand then fall down as though hit. Sometimes a driver, thinking he had hit him, would stop to offer assistance sometimes giving him money. But those familiar with this ploy would drive on. When that happened the young man would get up, dust himself off, and go on his way. On another occasion I saw a man in the middle of downtown next to a popular hotel stop, face the street, and pee into the

gutter as heavy early evening traffic passed by. Also, once outside our house on Jimma Road Vicky came to me chuckling and saying that she had seen a middle-aged woman stop along the side of the road, spread her skirt broadly around her and squat to pee. All the while she was talking with the man at her side. When she had finished, he helped her hoist the large bundle of sticks onto her back and they continued down the road. What made this event even more amusing was that in the process of repositioning her skirt, part of the skirt got caught up under her belt leaving her round, brown bottom fully exposed with neither one of them realizing it.

Aside from the comedy of such an event, we marveled at seeing lean Ethiopian men smoothly trotting alongside a donkey loaded down with sacks of grain to be sold in the city's market, stick in-hand to control the donkey's movements. Such practices among the country's predominantly rural population helped explain why we saw so few overweight Ethiopians. Another sight, accenting the strangeness of our situation compared with life back home, was that of a small camel caravan calmly walking down the center of the street outside our office windows.

With our routine intact and still plenty of time before our deadlines were upon us, our family settled into a comfortable lifestyle that was not unlike what we might have had at home. Three of our four children were in school, Vicky was a Cub Scout leader for Tim and a Girl Scout leader for Becky, we attended church on Sundays especially during the big rains, and we took an occasional trip down to the hot springs at Sodere (two hours away on a good paved road and 3,000 ft lower) on the way to the Awash Valley). Vicky and I joined the local golf club and I became the pitcher for the AID team in a fast-pitch league. Jim Turman, our next-door neighbor, was our first baseman. After our games we would sit on our back porch, beer in hand, hash over the game, complain about our sore muscles, and lament that we couldn't play the way we used to. For my part, in my prime I could throw the ball past most batters; but now, even poor batters could drill my "fast ball" down the baseline. Playing against us was a young 6'-2" 200 pound pitcher for MAAG. At the other extreme was the wonderful, yet sad story about a sixty-year-old missionary who caught (no less!) and ran the bases like a youngster. Before moving to Addis he had spent some 35 years in the remote areas of southwestern Ethiopia, then wrote a book about his experiences called, Redheaded, Rash, and Religious. He retired shortly after we left Ethiopia; then after a short time, returned to Ethiopia only to be murdered by communist rebels on the outskirts of Dire Dawa in eastern Ethiopia. After playing for just this one season, I gave up the game, saying to myself, "I can't play both golf and softball well at the same time. I have little chance of ever improving my pitching, so I had better concentrate on golf where my chances of improving are better.

Some differences in life style prevailed, however, our day guard also tended our yard and garden, so I was relieved of that duty, Vicky had Tirfe, who washed our clothes and the dishes and cleaned the house (I resisted the common practice of having a cook, saying that I preferred Vicky's cooking, but my real purpose was for Vicky to have enough to do so that she would not become bored), we had to boil all of our drinking water for 20 minutes then filter it and wash our fresh vegetables in a Clorox solution, we attended one, two, or even three cocktail parties a week, and at night could hear the whoop, whoop, whoop of the hyenas in the neighborhood. Whatever doubts we had that these were hyenas vanished one early morning on our way to the airport. While it was still dark a huge, shaggy one the size of a large dog passed right in front of our car. Although we were accustomed to their whoop, whoop, whoop, this was the first time we had seen one outside the Kenyan game parks. Besides, the local English-language newspaper would occasionally carry a story about a hyena breaking through the thorn thicket surrounding a farm-family's home and devouring a small child. Still, it was a pleasant life style, except fine restaurants and movie houses were few and we dare not stroll the streets at night for fear of being mugged. When we eventually left after five and a half years, it was not because of any dissatisfaction with our life style or the demands of my job.

Except for an occasional outing with family or when work took president, I would typically go directly from work on Saturday to play 18 holes of golf, then another 18 holes on Sunday. If a club tournament were coming up I might even practice once a week during the lunch hour; or play a quick nine-hole round after work. Vicky and I often played together, but she had her own group and played about as often as I did. So, with a busy five-and-a-half work week, weekend golf, and cocktail parties during the week, we led a busy, satisfying life. Our four children made friends with other children in the neighborhood and at school; besides, they enjoyed each others' company. And occasionally they would go to the afternoon movie at the MAAG base close by. Mike and Paul took up with two youngsters their same age whose father was with the Zimbabwe Embassy. The younger of the two, whose name was Dinga Dube, was a dark-skinned, chubby little fellow with a big smile. We thought he looked like Martin Luther King might have looked at that age. Well, one afternoon as I was bringing the four of them home after an outing at the Ghion's spring-fed pool, I heard, Dinga in all seriousness tell Mike and Paul, "As soon as you get home, be sure to tell your mother that you need to take a shower. Otherwise, you'll turn white!" And sure enough, Mike and Paul did just that, without realizing the difference in their skin color. At ages

five and eight skin color was something they couldn't see. Such openness to other races and cultures became inculcated in our children--solid, persisting benefit from having lived in Ethiopia.

Being comfortable with my work and our family having settled, Vicky and I sought out the golf course. The club house was a former hanger for small planes located just around the corner from our house. When we entered the building and asked about joining, we were directed to a middle-aged gentleman sitting on a stool at the bar. This was Dr. John Hobday, a large-animal veterinarian who had lived and practiced his profession in Eastern Africa since the end of World War Two. He was recognized for having developed the "Hobday procedure" for large animals whereby surgery could take place while the animal was standing. As a bush pilot he flew to remote places to attend to ranchers veterinary needs. John was tall with black flowing hair and a trim mustache. As we came up to him, John gave Vicky a penetrating and provocative smile. Then he looked at me and said, "What can I do for this lovely lady." Vicky practically melted on the spot. If ever there were a Caribbean pirate reincarnate that was John. He had been the Club's president for many years and was to remain so for many more.

While getting on in years, John still played a good game of golf; and back in England, if one could believe his stories, he was one of the better amateurs. He tells of playing on an English course where a plaque on the clubhouse wall still reads "Twice out of bounds, eagle three!" For those unfamiliar with golf, out of bounds carries a two-stroke penalty and an eagle three suggests a score of two under par, which on a par five hole would be three. So, how could he have been penalized four strokes and still get an eagle? Obviously, the answer is something out of the ordinary. As John explained it, he had hooked his tee shot out of bounds, but the ball hit the railroad tracks and bounded back onto the course, well down the fairway. Thus, no penalty. He hit his next shot, which also hooked out of bounds, hit the rails, and bounced back onto the green. Again, no penalty. He then sunk his put for the eagle. Wish I could remember the name of the course. But I don't doubt that the story is true. We eventually learned that John's son, Simon, was a professional golfer in England. After turning fifty, Simon played on the Seniors' tour here in the States where he was affectionately called "Scruffy" because of the way he dressed. After winning the Seniors' Open in 1994 the marketers of a major brand of golf wear suggested that Simon *not* wear their brand!

The course was anything but the manicured layouts so common in the States and other countries where golf is a major pastime. The fairways were stubble that resembled a harvested

wheat field. This condition was the result of the course lying dormant throughout the big rains, which lasted from mid-July to mid-October. Not only was it too wet to play and uncomfortably cold, we were not allowed to cut the grass during this period because the Emperor wanted the crop of three-foot high grass to feed his stable of horses. Because this stubble did not favor decent lies we were able to hand-place our ball, when in the fairway, within one club length from where it came to rest. Adding to the unfavorable nature of the fairways was the soil, which typical of the Ethiopian highlands, was a heavy, black, expansible soil. Once the soils dried out cracks would open up that were large enough to swallow the English-sized golf balls we used. If that were not problem enough, these soils caused other problems. For instance, one time a golfer participating in one of the tournaments hit an excellent tee shot down the middle of the fairway only to have his ball hit the side of a crack and ricochet out of bounds. Rather than receiving some form of relief, the golfer was simply told, "That's the rub of the green." Back home the golfer would surely have fared better, but our Club had for years been guided by the British, who are sticklers for "playing by the rules."

Besides the difficult fairways, the greens were actually "browns" in that they were made out of sand laced with petroleum to provide a firm surface. Once the ball was on the green, an attendant assigned to the green would smooth out a three-foot wide path between the ball and the cup. This arrangement normally worked well, except when it had just rained. Then, the "greens" became hard so that, unless the ball was lofted just right, it would hit the hard surface and bounce over the green. Compounding the problem was the soft, sandy areas in front of the "green." If the player hit the ball short intending for the ball to bunce onto the green, the ball would simply stop where it landed. There was another problem that sometimes plagued us by the way the cups were set. Because the sand tended to be soft around the metal cup, the cups were set about an inch below the surface. A well-stroked put going for the center of the cup at the right speed might hit the top edge of the cup and bounce back out. "Tough luck," as our British friends would say. "That's the rub of the green" again. Countering this difficulty, however, was a put stroked just right so that its speed was dying as it reached the cup. Even though off line by an inch or so, the put might fall in, as the sand next to the cup gave way. So, things balanced out. Once returning to the States, I was never able to regain the game I had in Addis, so perhaps the course did play easier, for although the length of the course was comparable to those here, the high elevation, the smaller English balls, which produce less wind resistance, and the hard fairways made the course play shorter. And if the cracked fairways and hard greens were not enough, light weight kites riding the wind currents high above the course would sometimes swoop down, pick up a golf ball, then fly

over the landing strip of the adjacent air field, and drop the ball thinking it were an egg to be cracked. Since this never happened to me during a tournament, I don't know how the British members would rule on this one.

For some of us, our principal interest in the Club was the golfing opportunity it offered us. But the Club was more than that. It was a social place, a virtual United Nations. Our members included several ambassadors, for instance, the son-in-law of Haile Selassie who was also the president of the Haile Selassie University, the ambassadors from several countries; some of the high-ranking staff from the American Embassy, but not our ambassador; the General Manager and his marketing director from Air India, the Dean of the Business School as noted earlier, Carlos Nelson from AID, and many others.

Annually, the Japanese Ambassador held a three-day tournament in which the winner was awarded a silver chalice. For the banquet that followed the awards we were served shrimp tempura and beef teriyaki flown in from Tokyo in black enamel cases. Some of us were invited to the Korean Ambassador's lovely residence for dinner. As team captain, I was introduced to the Emperor himself at the beginning of one of our golfing seasons. During the introduction, I made the error of looking him directly in the eye—I good, up-front thing Americans do. While I bowed in doing this, I should have made sure than my head was below the Emperor's head—not an easy thing to do, for he was very short— and I should not have looked down into his eyes. Still, Haile Selassie had much contact with expatriates, including Salyers (a friend of ours) who piloted the Emperor's 707. So, I hope I was excused as just another American who didn't know proper protocol.

Another time, as team captain, *Lij Kassa*, a prince and the University's president, asked me to join him and the visiting Eritrean team to dine on *enjera* and *wat*. As was the custom, the Prince ceremoniously began the meal by tearing off a small piece of the *enjera*, dipped it into some *wat* and hand fed each member of the Eritrean team, as well as myself. By this gesture, I knew I had been accepted into the Ethiopian culture.

One day our Club got word that Spiro Agnew might want to play golf one Sunday afternoon. He and his entourage of staff, security, and reporters, along with his bulletproof limousine had arrived in two large planes from Bangkok. The security guys swarmed the Club house checking it, as well as various small surrounding buildings, for places that snipers might be able to threaten the Vice President. Satisfied that he would not be subject to undue risk, security gave its go-ahead.

Because I had the lowest handicap at the time, the Embassy requested that I, along with Ato Tesema,⁵ our Club Manager, who also had a low handicap, join the Vice President and his playing partner from the Embassy. Of course, I said I was available and would be honored. But it never came to pass. About an hour before we were to tee off, the Embassy called to say that Agnew had decided on spending an afternoon at the MAG theater, a small Quonset hut that bordered our course. Thus, my chance to play with presidential royalty never came to pass. However, Vicky and I, along with others of the American community, were able to view him up close at the American Embassy when he gave a brief talk. I was especially impressed by his virility, trimness, and shining, well-tanned forehead. Had we known that, before long, he would leave office in disgrace, we wouldn't have been so impressed.

Vicky and I came to Ethiopia after having played golf reasonably well in Venezuela, but not having played much since then. The proximity of the course coupled with time for it, we looked forward to not only regaining our old form, but improve upon. And improve we did! By the time we left Ethiopia we had both been Club champs at the same time, as well as being team captains in our competition with our only rival, the Club in Asmara. The Asmara team comprised mostly Eritreans, who had learned the game while caddying, and military staff at Kagnew Station. We had a single annual competition, alternating between Kagnew and Addis.

As the number one seed for our Addis team, I was paired with Ato Tsehai for the Asmara team. Well, you might say, "What's the big deal about playing someone from this small community?" But the golfing community there was not so small, in that it comprised the fairly large US military base. It was more than that, however, Tsehai had captured the attention of several golfers in the region so that he was being groomed to play on the East and South African tours; and had even been funded to participate in a professional tournament in Nairobi. Recall that Gary Player, Nick Price, and Ernie Els are all Africans from this region. In our competitions, I had a slight length advantage our Tsehai, but that was all. I can't remember how our matches turned out. I think they were close. In any case it was a pleasure just to be competing against someone like that.

⁵ Occasionally, I would play with Tesema who would often hold my hand as we walked side-by-side. This gesture didn't mean anything in particular, just an Ethiopian custom.

But these matches with Tsehai were not my only competition of note. Once during a short vacation in Nairobi, we contacted one of the professional golfers there—an Englishman named Tony Payne. Vicky and I arranged for him to visit our club for a week thereby making it possible for our members to receive lessons from him, since our Club operated without a professional. As part of the publicity for the week, we set up a two-man team competition. I was paired against Tony and Al Temple, who was my partner, was paired against Ato Tesema, our club manager. We had about fifty of our members and a few from elsewhere, including Bogdanovic from the Tech Agency, following us for the full 18-hole match. On the fourth hole, I hooked into the rough, chipped out from heavy grass to within 75 yards from the green. From there I hit a nice shot that landed softly on the green and rolled into the hole. Afterwards, Bogdanovic, who did not know the game, confided in me that he thought such shots were run of the mill. But they are rare! Again, I don't recall how it turned out, but It was close match. Both Tony and I broke par. Vicky heard Dalton, who was in the crowd, saying that I either was a particularly gifted golfer or spent too much time playing the game. Another time, we had invited Dalton for a business lunch at our home and Vicky served creamed chicken on toast-one of my favorites. When he saw it, Dalton said, "Ah, chicken a la king!" Not his favorite meal. Vicky has never forgiven him, nor did she much care for him before that. She said she had the feeling that she reminded him of his first wife and that he thought she was keeping me from being more involved in my work. I responded that I didn't get that feeling. In fact, I liked the guy, thought he was interesting and admired him for his devotion to economic development and Ethiopia.

One sleepy afternoon after finishing a round of golf, I sat down with Temple and a couple of other pilots. The latter, who had flown combat missions in WW-II, began trading stories. Two of these stories I remember well. One was about a fellow who had just come back to southern Florida from intense fighting in the Pacific. After a heavy night of drinking he was returning home on a dark, rural road—the kind at the time with no border markings where the black asphalt soaks up the light. As he rounded a corner going some 70 mph, he saw that a tractor with a flatbed loaded with chickens was crossing the road about 200 yards in front of him. Rather than slam on the breaks, smiling to himself with both hands on the steering wheel, he simply *pulled back on the wheel* as though he were back in his plane and would fly right over them. Of course, it did not and he plowed right into the trailer sending chickens into the air. Fortunately, he was not seriously hurt, only greatly surprised. The other story was about P47 pilots who patrolled the English Channel. This was after the Nazis had developed the V-2 rockets that they were using to bomb London. The pilot who had only recently been assigned to this combat theater, but had had his share of dog

fights, came across one of these rockets "puttering" across the channel. Forgetting where he was, he easily overtook the rocket, which were not speedy, closed in on it to within a hundred yards or so, then open fired. An easy, direct hit caused it to explode in a big flash that crinkled the plane's wings almost causing it to crash. The pilot made it back to England, but badly shaken.

Besides playing with Temple, two of my frequent golfing partners were colonels in the Emperor's Body Guard. Both were from India and had been in Ethiopia for several years. The first I got to know was Hemith Singh, a Sikh who had given up the turban. In his mid-forties, Hemith was tall, broad shouldered, and strong. He personified the native elite from Britain's colonies. He was probably more English than the British themselves. He drank tea, played bridge, and (of course) golf. He spoke with a clipped British accent, except his Vs came out Ws so that when he spoke of Vicky it came out *Wicky*. He attended England's prestigious Sandhurst Military Academy; one of his grandfathers was the Raj of Jaipur. He was married to a lovely, modern, and well-educated Indian lady, who went by Jane. They lived in a luxurious home in one of the better Addis neighborhoods where we visited them from time to time.

The other Indian was Saburawl, or Sabu for short. He was strikingly handsome with a thin, well-trimmed mustache and a flashing smile that showed his gleaming white teeth. He reminded us of Douglas Fairbanks. Sabu gave us the impression that he had not come from a privileged family, as had Hemith. Since the number of foreign body guard officers was small, we suspected that he and Hemith must have spent considerable time together. It was probably Hemith who persuaded Sabu to take up golf shortly before we met. Before long, when he felt comfortable enough with his game, which he learned on his own, he asked to play with me. Being a keen observer and with the excellent hand-eye coordination needed to play field hockey at the international level as he did, he had soon lowered his handicap to the single digits. Not long after that he wrested the Club championship from me, beating me two up on the thirty-fifth hole.

Ambassador Chang, of the Korean Embassy, with whom I played occasionally, told about playing golf back home and using orange painted golf balls to help find them when snow as on the ground. He never told us, but others who knew him from having lived in South Korea told us that he was a highly decorated pilot. Because of our golfing association, Ambassador Chang invited Vicky and me to a small dinner at his elaborate ambassadorial residence, replete with oriental decor. The house was spotless, his wife charming and lovely, and the dinner delicious. So, although golf was our pastime, it opened doors that benefitted my standing, and hence, work on our project.

During the ten months or so that I was Club champ, I was challenged twice—once that I knew about, the other when I didn't. The challenge that I knew about came from the best player among the caddies. He was formidable, as were the caddies from Asmara. There, the caddies, because the Club allowed them regular playing rights, were on the team that played our Club annually. Our Club did not allow the caddies to play in our tournaments. But the Club was closed to regular members once a week so that our caddies would be given the chance to play. This restriction, however, did not keep them from swinging a club, chipping, and putting on their own makeshift green. So, the caddies had their own tournament based on their once-a-week play and the winner asked if he might challenge me to a match to which I agreed. He was tall, for an Ethiopian, square-shouldered, and strong. We played with a small gathering following us and I think I won, but not easily. The upshot, however, was that I, and Vicky by association, gained status among them. And we were no longer hit upon for so-called "emergency" loans. Once, our son Tim's bike was stolen from the Club where he had inadvertently left it; and the caddies found it for us and brought it back. Another time, I had left one of my golf clubs by the side of the green and a caddy brought it over to me. The relevance of these events, is that we were seen as part of their society, not as foreigners, and as part of their society, treated honestly and with compassion. What a difference, from the way we were first treated.

The other challenge came from the Japanese, but I had no idea what was going on. One afternoon, as I walked off the eighteenth green, a Japanese follow came up to me, bowed slightly, and asked if he could have the honor of playing with me. Not knowing him, and being somewhat taken aback, I hesitated then smiled and said, "Sure, I'd be glad to play with you. But, I'd like to have my wife join us. She's a good player. I hope you won't mind." To which he accepted. Now, the Japanese were a strange group of players. They came mostly from Akaki, a small town not far from Addis. They were the technicians and supervisors of the Japanese textile mill there. Occasionally, they would have a tournament and literally take over the course. Since we operated the Club informally, not with the usual sign-up times, their sudden arrival would take us by surprise. And since they kept to themselves, mainly because they spoke neither English nor Amharic, we never knew when something like this might occur. And most of them were not good players. Once, when Vicky and I were playing by ourselves, we got behind one of their foursomes on the first hole and waited on nearly every shot. Finally, when we walked up to the fifth hole and they had still not teed off, we expected them to ask us to play through, but they didn't. We waited for them to play down the fairway and as they wandered around, I'm not sure doing what, I lost my patience and yelled, "Hey. We're playing through." I hit the ball that sailed way over their heads.

When we finished the front nine and walked into the Club house, a small congregation was awaiting me staring angrily. It seems, much to my surprise, that the *hey* or what they thought I had said was an insult in Japanese. It was not that I had "hit into them" that bothered, but the insult. I apologized, saying I had nothing of this sort in mind, thus escaping a potentially ugly incident.

But, back to my story about the round with the Japanese fellow. What had happened without my knowing it was that this group of Japanese had held a tournament among themselves and the winner was expected to challenge me to a match. Our caddies knew about it, but kept quiet. So Vicky and I played with the fellow thinking it was just a friendly outing. I beat him handily, since he wasn't very good. But, what must have been the insult of all insults, Vicky beat him too! It was only after we had finished that our caddies told us what was going on.

Not all of our family life was spent in Addis. Once in awhile we would head south to the Lake Country and overnight in one of the rather simple resorts there. One of these, at Awasa, showed the lovely lake nearby with its boating and swimming facilities. A picture of the docking area, with reeds showing along the shoreline, looked attractive enough. But danger lurked beneath the surface. These reeds were a breeding ground for snails that were the host for the liver fluke causing schistosomiasis—a debilitating and long-lasting disease common in much of the developing world. We were told that the only danger was along the shoreline, not once one was away from the shore. Even so, we did not use the lake. We found the spot simply a nice change of scenery.

Or sometimes, during the long, gloomy days during the big rains when the sun rarely came out, the temperature dipping below 50 degrees F, and the children practically living in their mud-caked, rubber boots we would head southeast for the Awash Valley. Just outside Nazareth was Sodere—a picnic area with a large, spring-fed swimming pool—where the sun was likely to be shining. The charge was minimal and the grounds were crowded with visitors like ourselves; the grass was green, and the fenced off area surrounded by delicate-leafed acacia. During one of these outings we noticed two Russians eating their meal close by. We thought we recognized each other probably through our meetings at the Planning Commission. Approaching our family with soft smiles on their faces they offered us a drink from their bottle, which we declined because of our children, then traded small talk Soon, they began probing me, wanting to know about our project. I had no problem with this, since the Ethiopian government made ample use of financial and technical assistance wherever it came from. The interesting thing about this incident was that it revealed first hand what we had heard: that Russians were *never* allowed to be alone in public. Our discussions

did not last long and we soon headed home so that we would arrive before dark. Sometimes on our way back we would take a side road off to the north that ran along the Awash River, where we could see the hippos half-submerged in the river or lying asleep on the river's banks. As we continued northward we would observe along side a steep hillside the many fierce-looking baboons with their long incisors—some that would simply watch us from afar, others would be swinging amidst the ticket of trees, some might cross the road for a better look at us, and at times some would even hop onto the hood of our car and stare at us through the windshield. Now, that was game viewing up close!.

More exciting was our trip to the lovely hot springs in the Awash National Park 250 km off the main highway to Dire Dawa. Other expatriates had spoken of the place, which we thought would be interesting. With a long weekend coming up we loaded the car and headed out. After driving for several hours, we thought we were in the general area and began searching for the turnoff. We found nothing that might suggest the entrance to a national park except a small sign pointing to a dusty, one-lane road. Before long the road led us into a riverbed lined with phreatophytes. After following this tortuous route at snail-like speed for nearly an hour, we were about to give up thinking we had taken a wrong turn when we emerged from the gully onto a smooth gravel two-lane path. Just ahead was a lone sentry sitting on a small, wooden chair outside a pillbox-like shack. In front of him was a two posts on either side of the road with a single small pole blocking passage. There was nothing to keep us from simply driving around this feeble blockage, other than the large rifle resting on his lap. We paid the small entrance fee, asked for directions and continued down the road. After another ten kilometers or so we saw up ahead an oasis-like group of palm trees. Relieved at finally reaching this place we anxiously looked forward to jumping in the clear pool of spring water that we had heard about.

Our expectations were marred somewhat by the loneliness of the spot, for we had not seen anyone else, save the guard, since turning off the main highway. I pulled our small VW into the small and empty parking lot. Our children jumped out and rushed to the pool, then suddenly came running back to our car saying someone was already at the pool. With curiosity, Vicky and I went to see what they were talking about. And to our surprise we saw two Danakils slowly dressing themselves. Unlike the Masai in Kenya who are generally peaceful cattlemen with their loosely fitting okra-tinged robes and long-accustomed to begging from tourists, the Danikels have kept apart from society: then men preferring to tend their cattle and fight enemy tribes while leaving crop growing to their women. They have the reputation as being fierce fighters who have not entered

into Ethiopian society. Stories about them abound, one being that their main nourishment is blood curdled by urine from their cattle, another being that they are known to whack a slab from the haunch of one of their cattle, collect blood from the wound, then slap the hide back in place, and another that a young warrior cannot chose a bride until he has castrated an enemy.

These two young men fit the awesome description about these warriors. They were tall with long, slender sinuous muscles, and shiny black after having just cleaned themselves in the pool. Slowly, they wrapped their cloaks around themselves, strapped the bandoliers across their chests, adjusted the long-bladed knife at their sides, and picked up their rifles. What struck us more than anything was the unsmiling gleam of their white teeth as they came toward us. They motioned to us their first and second fingers that they wanted cigarettes. We countered with a shrug of our shoulders and upturned hands that we didn't not have cigarettes, but pointed to our car. Opening the door we took out a bag of candy and offered them several pieces, which they slapped to the ground in obvious disgust. Sensing the latent danger, Vicky and I managed to get the kids in the car and headed out, thinking we had been luck to escape. To my surprise, Vicky suggested we go back to the guard and get him to run these guys off. With Vicky in the back seat with the kids, the guard got into the passenger seat next to me and proceeded to load his rifle. So, back we went with our armed guard. Fortunately, when we got there, the two had gone and we were able to enjoy our swim. That is, Vicky and I enjoyed it, but not the children, who complained that the water was too hot. Years later, while recalling this event, I marveled at how fearless Vicky had been. Perhaps, her innate courage, although we never discussed such thoughts, accounted for how easily we as a family had handled our uncertain lives overseas.

Late afternoon was upon us by the time we got back to the main road and we headed for the headquarters of the Awash National Park not far away. We check in at the small, thatched-roof reception building and arranged to overnight in one of the canvass tents along the river. Looking around the hot, dusty interior we saw various photos of the game park's animals, trail maps, and the like. But what really captured our attention was the dried skin of a python that must have been 15' long and 8" across. From there we proceeded down the road to the camp site about three km away. Suddenly, Vicky cried out, "Look! There's a snake lying across the road about 50 yards away." "Nonsense," I said, "that's just the shadow of the tree up ahead." "But," she came right back, "The sun has already set!" Sure enough, it had. And as we came up to the spot, extending from the middle of the road and down into the ditch was a python every bit as big as the one we had just seen. Believe it or not, I rolled down the window to get a better look. And the snake raised up to eyeball

level looked at us intensely no more than three feet away, then lowering itself crawled back into the undergrowth. That was not all of the excitement.

Besides wondering just how far a reptile like that would wander, since we were about halfway to our camp site, I also worried about the hippos in the river bordering our tent.

Somewhere in our travels we had heard that more people in Africa are killed by hippos than by lions. So, settling in for the evening, we put our children in the back of the tent, I was by the entrance, and Vicky between us. All night long we could hear the groaning and croaking of the hippos wondering if they might invade our tent. Needless to say, we had a restless night.

Now, back to our work plan: once the Ethiopians had approved it Clancy with Schwarz and my input arranged to bring over fifteen short-term consultants who wrote nineteen studies. We five so-called long-termers had the responsibility of gathering background material prior to the consultants' arrival, preparing their terms of reference designed to guide their work, arranging for their meetings and trips, revising their reports when necessary, and arranging for debriefings with the Planning Commission and John. Attending to all of the detailed such a program kept us focused on day-to-day issues, until one day during the summer of our second year there, I woke up to the unsettling fact that we didn't have much time left to finalize these consultant's reports and to begin thinking about our final report.

My work intensified as I became busy with the RAM and irrigation studies. The RAM study, mentioned above was the "brain story" of the *brilliant* Dr. Carl Miller, who wished to experiment with a systems approach to economic development. Remaining at SRI headquarters he sent Jim Sartor and Jim Mackin to Ethiopia to collect *loads* of physical data, such as temperature, rainfall, and soils, as well as crop production, transportation costs, and markets. Although Jim & Jim had never worked in a country like Ethiopia, their enthusiasm, energy, and resourcefulness made up for this lack of experience. Helping them was John Asfaw. Unfortunately, the results of this considerable effort produced few significant results. Almost a laughing outcome was a preliminary recommendation that large groups of farmers grow *French green beans* for shipment to Europe. Not only did most Ethiopian farmers, for whom the suggestion was made, need to diversify their crops, few had any experience with this crop, and, should the European market not materialize, the local market could not absorb the amount of production being recommended. It's hard to say how this study became a part of our contract, but it lacked the awareness of developmental conditions important to our overall study.

Part of my backstopping work for Sartor, Mackin, and Nevin required that I scout areas of the country suitable for their studies. Ethiopia is a vast country with, at the time, a road system limited mainly to connecting the country's few major population centers. Many areas are separated from the rest of the country by deep canyons that rival our Grand Canyon. One of these canyons carries the headwaters of the Blue Nile, originating in Lake Tana north of Addis. Once one gets off these main routes vehicles might cover little more than five miles in an hour and require rugged tires and suspension systems.

So, the best way to see the country was by flying. For this, I relied on Al Temple, a bush pilot for the AID Mission on loan from the US Department of Agriculture. He had been in Ethiopia for years and knew Ethiopia like the back of his hand. He carried supplies to the missionaries in the southwestern part of the country who were serving the primitive, black-skinned Anuak tribe near Gambela on the Baro River. Pictures of them that I had seen reminded me of the Sudanese Christian refugees who would come to the Anglican Church we attended. Al was a light-hearted, husky fellow with a square face who once was a starting guard for Southern Methodist University. Eventually, not right off, we became close friends that derived from our competitiveness on the golf course as well as our interest in football. Having been in Ethiopia a long time, he did not take quickly to recent arrivals, especially those from "egg-head" institutions like SRI or the universities. His toughness and calmness under pressure, undoubtedly had saved his life several times. For example, one time while he was flying, his plane conked out on him and he was forced to land on one of Ethiopia's few paved roads. After landing, he checked out the engine, made a few adjustments, asked those standing next to their vehicles to clear the way, and off he went.

We got the ideas where we should scout from an earlier report by the US Bureau of Reclamation report funded by the World Bank. Clancy arranged for Bob Nevin, an irrigation specialist, to come over for two months. Bob was an energetic, up-beat guy who could quickly appraise the physical and agricultural potential of an area.

Bob first settled on an area outside Kombolcha, about 400 km north of Addis on the main highway to Asmara. The idea was to drain several thousand hectares of land. Principal advantages of the proposed scheme, which meant lowering the water table of a swampy area, was the abundance of water, the location's closeness to a major market of Desse, and many interested farmers. Principal disadvantages were the possibility of soil salinity and water logging and farmers'

inexperience cultivating drained soils. While such problems might kill the proposal, our work was to look at investment possibilities; and, if they appeared attractive enough, more probing investigation could be done later. Accepting this concept, Bob proceeded to sketch out the broad outlines of a development scheme.

Bob got his idea for the second irrigation project from Dr. Nastasi, an Eritrean with Italian blood, who was the Agricultural Chief in Asmara. Besides his government job Dr. Nastasi grew cucumbers, eggplant, capsicum, and other vegetables on his small holdings along the Dessei River upstream from Massawa on the Red Sea. Dr. Nastasi had found a profitable market for his vegetables in Europe during the winter months. When the six-day war in June of 1967 closed the Suez Canal, he no longer could use this shipping route. Instead, he found that he could ship his produce on the 707s returning to Europe using the plane's unused cargo space. (Ethiopia, including Eritrea, received a lot of high-valued manufactured goods from Europe by air, but had little of this sort of commodity for the return flights to Europe.) Recognizing the potential, Bob went to the site where he found the soils good, the water abundant, and farmers interested in replicating what Dr. Nastasi had already proved profitable. With the relevant information in hand, Bob proceeded to design a scheme many times larger than the area farmed by Dr. Nastasi.

I always enjoyed these visits to Asmara. Its clean, paved streets with curbs and gutters, sidewalks, and street lamps were a great contrast with other Ethiopian towns and villages. Along the main street were rows of royal palm trees and a Catholic church. The downtown area contained restaurants, pastry shops, hardware stores, and other places of business. The several small *pensions* were usually run by a family of Italian descent. The whole atmosphere was that of a Mediterranean village. As a result of the Italian occupation years ago many of the residents spoke Italian, as well as Tigrina, and Amharic. The only thing missing was a water front, and that could be had by descending the steeply winding road some 7,000 feet below 115 kilometers to the east.

Bob's writeup of these two investment possibilities included a general description of his approach, the advantages they presented, and then detailed estimates of costs and benefits. We then met with the Tech Agency and Fischer to present Bob's findings. All went well. Bob then turned these drafts over to me and headed back to the States happy, as was I, with his productiveness over the past two months. Now, it was up to me to conclude my review of Bob's drafts, finalize the rates of return calculations, and send them off to Menlo Park for final editing and publication. But my enthusiasm was short lived. I soon found myself mulling over the Eritrean project, sometimes

waking up in the middle of the night with the uncomfortable feeling that something was wrong. Eventually, reaching back to my HBS experiences, I decided to look more closely at Bob's numbers. I first checked with exporters in Addis about the size of the European market for fresh vegetables sold during the winter months. Looking over their figures, I was satisfied that the market was large enough to absorb the output from the investment. I next looked at the volumes to be shipped during the three-months when the vegetables would be flown to Europe. And there it was! For Bob's scheme to realize the assumed revenues on which his profitability estimates were based, a fleet of eight 707s would be needed every day of the week for the full three months! This number of flights was clearly out of the question; so were the rates charged to Dr. Nastasi, which covered little more than out-of-pocket costs. The airlines must have felt, when offering this rate, that it was better to get some cargo revenue on these return flights than no revenue at all. *In no way could air shipments devoted solely to a cargo of fresh vegetables be justified*. Thus, Bob's scheme imploded! What was profitable on a small scale was not on a large scale. So, I was forced to abandon Bob's scheme and settle for a much smaller investment devoted to vegetables grown for the local market.

With that project out of the way, I turned to the Borkenna irrigation project. When I calculated its rate of return, I found that the project was only marginally acceptable, certainly not one to create much excitement. When I called Bob long distance, he objected strenuously saying, "Something's wrong with your calculations! I know that's a good project." "Fine," I said, "I'll send you what I have done and maybe you can see where I went wrong." Eventually, I received his reply in which he said that he found nothing wrong with my calculations. He then went on to say that he had over estimated investment costs and under estimated the benefits. So, I got on the phone again and asked Bob to send me what he *really* thought the correct values ought to be. Once I received his response, I was able to recalculate the project's profitability; and, sure enough, the results were attractive. At the outset, I had advised Bob to use what I had learned to call "best estimates." These are the investigator's belief in what costs and benefits would truly be, if the project were undertaken as planned. Instead, Bob had "biased" his estimates. He said he estimated investment costs high so as to be sure that potential investors would commit enough money to cover the contingency of cost overruns. And he thought if he went low on his production estimates, he could always back off, if challenged, by saying he was only being cautious. I had no concern over Bob's wish not to over-state the proposal's value. But this is best done by what is called "sensitivity analysis," the concept I had included in my dissertation. Here was a real-world opportunity to put the idea to work. Recall, that such an analysis is nothing more than evaluating a proposed investment using the values believed most likely to occur, then making subsequent calculations using figures that represent "what if" situations when a project looks attractive. That is, "What if, investment costs are higher than my best estimate; or "what if" my investment estimate is okay, but I've over-estimated revenues." And so on.

What these two examples reveal is that project analysis, which had become my speciality as a result of my Stanford studies, is complex and subject to numerous short-falls. This is the reason I had proposed *pre-feasibility* studies to John and the Ethiopian Government so as to cover a wide range of possibilities, rather than get bogged down by detailed study of only a few possibilities that might, in the end, prove undesirable. I did not fault Bob in his work. I did not have the technical knowledge in irrigated agriculture that he did. On the other hand, the feasibility analysis, although it may have seemed simple to him, was beyond his capabilities. The answer is *teamwork*.

More on Al Temple and flying: shortly after our arrival in Addis, Al took Carlos Nelson and two other AID officials on a flight to the southern Sidamo region. As they approached the Ethiopian village of Moyale on the Kenyan border, he noted a large herd of cattle heading south. Suspecting that these were cattle rustlers, he dove down to take a closer look. One of the passengers noted that the herders were carrying rifles. "That's no problem," Al said, "I've seen these guys lots of time. They don't know how to lead." But they did! Pointing their rifles at the plane traveling probably no more than 150 mph, they fired. One of the bullets hit the underside of the plane then traveled through Al's cockpit seat, completely through his thigh imbedding the seat's fabric in the wound, and out the other side where the bullet lodged just under the skin of Carlos's leg. Al immediately climbed to gain altitude, asked if others had been hit, cinched his seat belt to control the bleeding, then flew for half an hour until they came to a landing field. Twenty-four hours later they were back in Addis, where they related their harrowing experience, and ten days after that Al was back on the golf course, against doctor's orders.

Did flying in small planes frighten me? Sometimes, although I felt comfortable flying with Al. Even so, I had been around enough fatal accidents while going through flight training during WW-II that I was cognizant of the danger. But Temple wasn't always our pilot, and loss of life from small plane accidents in Ethiopia was not uncommon. Shortly after arriving in Ethiopia, the landlord of one of the homes we were hoping to rent flew off in questionable weather even though he was not qualified to fly by instruments. He didn't survive the crash. Two senior employees for Mitchell Cotts slammed into the side of a mountain on their way to Kombolcha. I once flew the same route with just enough visibility to see the hills rising up on either side of us.

So it was with Al that I was able to see so much of the country from the air. Sensing the fear that some had of flying in small, single-engine planes such as his Cessna, Al liked to tease. I've seen him fly with his right eye closed to give the passenger to his right the impression that he dozed off. Once on the three-hour trip back from Asmara, I asked him what he would do if the engine suddenly conked out. Without hesitation, he said, "Right down there in that river bed." I was both impressed and reassured. On another trip back from Asmara, Al headed back on a south-east tack along the west edge of the Red Sea. Below, in the clear waters we could see schools of huge string rays with their long stingers trailing behind them. In a rush of boyishness Al dove the plane down to skim the shoreline causing the goat herder to threw up his hands in defense. Before long we came to a landing strip with a few rickety building made of crudely-fitted drift wood, dusty, and covered with palm fonds. The landing area was no more than an area cleared of brush and marked by a few white-painted stones. Al wanted to check on a friend of his here in this remote area. When I commented on the rough landing, Al said, "You don't know how difficult it is to land in a stiff cross-wind. I had to land on one wheel with windward wing down to keep us from flipping over."

Another time, Al took me to the extreme northwest of the country to visit the operator of a cotton plantation outside Tessenei. In making this flight from Asmara, he was told not to fly close to the various hillocks along the route, because rebel fighters of the Eritrean Liberation Front (ELF) had been known to take pot shots at planes flying close to the ground. Approaching the landing field at Tessenei, Al circled out over the Sudanese border then buzzed the air field to alert the youngsters who were using the landing area as a soccer field and others as they walked to and from the local village, and to frighten off the goats and other animals. Our meeting with the Scotsman who operated the plantation was to find out the level of insurgency in the area and whether it would be safe for Sartor and Macken to visit the Om Hager region, an area about a hundred miles to the south. This was a fertile, relatively undeveloped area the World Bank thought would be suitable for mechanized farming. The principal problem we eventually found was the high percentage of the residents who suffered the lingering effects of malaria. While this particular strain of malaria seldom killed, its lasting effects were debilitating. The Scotsman told us that he had heard of no trouble. As a result we told Sartor and Mackin that it ought to be safe for them to go there, which they did without incident. About a month later, we read in the local newspaper that the ELF had raided a small town north of Om Hager and had taken several foreign workers hostage. They could

have been our guys, but luckily they were not. As I recall the hostages were eventually set free unharmed, but shaken by the experience.

Al retired shortly after we left Ethiopia in 1972 returning to his home town of Tyler, Texas. Alas, before long we heard that he had died of a massive heart attack while sitting in his livingroom chair, still in his fifties. Ironic that he should die this way after having lived the dangerous life he had for so many years. And what might I have done, had he died at the controls when I was the only other one on-board. I had heard stories about novices taking the controls of a small plain when the pilot had become incapacitated and had safely landed the plane. But I had never gotten around to asking Al what I should if this were to occur to him. Given Ethiopia's rugged terrain, he might have simply told me, "Say your prayers."

On another trip with another pilot we were making our approach outside Dire Dawa when I looked down and saw that the landing strip was little more than a narrow grass area heading up the side of the mountain. While the slope was not great, the strip was far from level as is usually the case. As we got closer I noticed a gully running across the runway about halfway up, which must have been caused by a recent downpour, and asked the pilot how he was going to land. "No problem," he said I'll just land on the other side." This he did, but was out of runway by the time our plane came to a halt. Once on ground, I really worried. How were we going to gain enough speed going down hill to clear the ditch? And once committed, had our speed not been enough, I thought we would not survive. But we made it without incident. I guess bush pilots such as ours had experienced enough of these situations that it didn't bother them. On our way back home we flew over an area strewn with rubble from that what looked like former mud huts. Thinking this might have been some ancient battle ground, I asked our pilot if he knew anything about it. He said it was indeed a battle ground, but not ancient. A battle had taken place between the Afars and the *Isas* within the past year. Since these two warring tribes have been fighting off and on for years, this latest skirmish wasn't newsworthy. As we continued on our way flying on a level course over a series of valleys and hilly outcrops, our pilot pulled out his flight map to plot our course back to Addis. While doing this, I noticed that we began to come closer and closer to these outcrops. Still, our pilot kept his head buried in his maps. Finally, thinking we might not clear the next one coming up, I tapped him on the shoulder and pointed ahead of us. Looking up, he immediately pulled back on the controls just enough to clear the jutting rocks. Who knows, we might have missed anyway since judging the height above ground is not all that easy. Even so, I suspect pilot error is the cause of many fatal accidents.

The pilot who frightened me most of all was the newly arrived pilot for Axum Air, who appeared not to have flown under our conditions before. His habit while he revved each engine, then abruptly throttled down just before takeoff was to close his eyes, mumble what could have been a prayer, then cross himself. Not the most comforting practice for us passengers. Besides being prayerful, he might have been absent minded because one time while taking Sartor and Mackin on a flight, he forgot to tighten the oil cap on his classy, two-engine Piper Apache. Then as they were speeding down the runway, oil came gushing out of the engine smearing the windshield to the point that he had to open the cockpit window and lean his head out to see where they were going.

The scariest time of all, however, occurred when this same pilot was flying Sartor, Mackin, and me to Asmara. Being new to the country and unaccustomed to taking off and landing at high elevation, he only partially filled his tanks so as to lessen the plane's weight. By doing so he didn't have enough fuel for the three-hour flight. So, about an hour into our flight, we were surprised to find ourselves heading east and beginning a series of wide descending circles from our normal flying altitude of 10,000 feet. Looking at his flight map, he had found what looked like a refueling spot right in the middle of the Danakil Depression. This location is 370 feet below sea level—one of the lowest, hottest, and most formidable places on earth, devoid of vegetation, but brimming with volcanic activity and colorful salt formations that reminds one of Yellowstone Park. Apparently, he believed what he had seen on the map. By this time, those of us who had spent at least some time in Ethiopia had learned to be skeptical of maps of any sort, let alone one detailing this god-forsaken place. In any event, as we made our approach to land we saw no buildings or sign of life, just a smooth, half-mile runway. But as we were about to touch down, for it was too late to even think about continuing further with our gas tanks nearly empty, we saw an drab, olive-colored plane landing in the opposite direction. (Normally, one prefers to land into the wind, but there was no wind, so it made no difference which direction our pilot had chosen.). As we came to a halt, we sat watching the other plane taxi over towards us, its pilot get out of the plane and approach us with a puzzled look on his face. Luckily, he spoke some English, since none of us spoke Amharic. He told us he had spotted us as we were descending and decided to check us out. When our pilot told about his desire to refuel here, the military pilot gave him a sympathetic smile and said this was not a refueling station, but that he would be happy to drain some of the fuel from his plane's tanks so that we could complete our trip to Asmara.

Before long, the refueling was complete and we headed northwest for Asmara. Our trip of about an hour required us to steadily climb over 8,000 feet to the landing field there. Below us throughout was some of the most rugged terrain one could imagine, with no place to land should we have to. Riding next to our pilot I could see the fuel gauge for each engine. It seemed to me that both were bumping on zero! Not only that, I kept thinking, "Gasoline is lighter than water. If any water had accumulated in the military plane's tanks, we would have gotten it." Perhaps, such water accumulation doesn't happen. But this was what kept going through my mind during our flight. So, as we made our climb, I was as nervous as could be; shortness of breath, the nerves down my spine tense, and counting the minutes left in our accent. Then, about midway there, I said to myself, "What the heck. There's nothing I can do. If we go down, we go down." And at that point I suddenly relaxed: my mind cleared, the ache in my back went away, and I ceased counting the minutes till our arrival. I can't explain what happened, but it was a godsend. The only other times I have experienced such a sudden relaxation have come while experimenting with transcendental meditation and once or twice while traveling the highways of Pakistan. Before long we saw the cloud bank that signaled the top of the escarpment with Asmara just below. We had made it! We did have enough fuel. Perhaps, I had just misread the gauges. The incident reminded me of Raskolnikov in talking with detective Porfiry Petrovich, "There are times when a man, after having survived half an hour of mortal terror with a cutthroat, suddenly finds, with the knife finally touching his skin, that his terror has vanished. He sat down right in front of Porfiry and looked at him without blinking" (Fyodor Dostoyevski's Crime and Punishment).

As the foregoing activities occupied more and more of my time and as the others got immersed in their jobs as well, our bickering subsided and our team began to function reasonably well. Each of us had been assigned specific activities that included back-stopping the many short-term consultants Bredo had sent over. It was during this period that John advised us that Ato Tekalign Gedamu would be replacing Ato Habte Ab as the Tech Agency's General manager. Tekalign was handsome in the way many Ethiopian men are—chiseled features, slightly brown skin, trim build, and modest height. He exuded the confidence of someone who had proved himself internationally, both through his master's degree in England and his subsequent work with the United Nations and Haile Selassie University. He came from a small, highland village west of Addis from modest parents. I never heard how he was able to rise above those of his villagers. But his success did not surprise me, for he was bright, ambitious without being unpleasant; moreover, the egalitarian nature of Amharic society made it possible for gifted children to succeed, at the same time early instructions in English prepared for those who were successful to handle the English

requirements of the national university. At one point, a small group of Ethiopian nationalists wanted the country to revert to Amharic as the official language, including using this for its educational system. One could understand their desire to bolster the nation's pride through adoption of this ancient language. But, of course, English was a front-runner in technology, few advanced texts were available in Amharic, and Amharic was not the only language spoken in the country, probably not even by the majority of the country's population. Tekalign's confidence was not misplaced, for he eventually became the Minister for Public Works before fleeing Menguistu's regime. He closed out his career as the Vice President of Finance for the African Development Bank in Abidjan.

During this meeting with John and Tekalign I was able to persuade the two of them that our contract requirement of producing *feasibility* studies should be interpreted as producing *pre-feasibility* studies. By attempting the latter, which are less involved than the former, we could cover a broader swath of possibilities, although in less detail, and thereby have a greater chance of producing meaning results. I was able to argue this way because, with my engineering background, I knew just how time consuming and technically involved true feasibility studies can be. For instance, they require field surveys, site selection, perhaps soil tests, civil and engineering designs, marketing studies, organizational schemes, and financial arrangements. By contrast, *pre-feasibility* studies approached each of these topics by testing whether each critical requirement *could* be met, not *how* it might be met. For instance, was the demand for increased livestock hides sufficient *somewhere* for the increased output from a tanning plant? Not, where was that demand? And, what were specifications demanded by the buyers? These details could come at a later stage in the project's development, should the decision be made to proceed.

While I was attending to the consultants who were my responsibility, Tekalign began impinging on my time—not without my acceptance. It started out casually shortly after he took over as the Agency's General Manager, when he asked me for my opinion about Ethiopia's competitiveness in the cotton export market, which was not one of our project activities. I came back with my analysis a few days later, which we discussed at some length. Then before I knew it, he dug more deeply into both the Agency's activities and those of the Planning Commission. One thing led to another and soon I was spending as much time on extra-project activities—all Ethiopian requests—as I was on our project activities. During the next twelve months, he would also get me involved in studies on a brewery, tourism, veterinary medicine, an international food company, a farm development project, World Bank proposals, expansion of Mitchell Cotts in the Awash valley,

and ways to beef up his Agency. One incident sticks out in my memory: after doing an economic analysis on some subject Tekalign had asked me for, I went on to suggest how he might implement my suggestions. He brought me up short saying, "You don't have to tell me how to deal with others in my government. That I know how to do. Just give me the results of your analysis and the implications of your findings."

I didn't mind taking on these assignments because I was generally interested in the topics. Helping Tekalign out gave me better insight into what was going within the Agency. Never mind that this extra work took up some of my evenings and weekends, this was the sort of work that had motivated me to return for my PhD. And the effort put me in contact with others within the Government. Before long I became acquainted with Belay Abay, the widely respected head of the Planning Commission. This breakthrough came during a Tech Agency meeting in which Belay Abay sat in, along with Dalton and Jerry. Some subject came up in which I spoke out about certain economic development concepts relevant to Ethiopia's situation. Belay seemed to recognize that I was speaking the language of development and that I therefore might join him in contributing to their current planning efforts. My interests were quite apart of those of the other members of our team-Clancy who took his assignment for the money and to be able to travel; Marouseks for money alone; Schwarz probably just to find employment; and Borton to further his sociological career.

Added to the extra work I was doing for Tekalign, and occasionally for the Planning Commission, Fischer also would sometimes give me short assignments. One of these was to review an investment proposal by an American named Ted Harris. Harris had recently arrived in Ethiopia as part of AID/E's efforts to stimulate US investments in the country. He was in his early 40s, handsome, energetic, and smooth-talking. He, in association with other investors, had submitted a proposal to build a large meat-packing plant south of Addis in the extensive savannah surrounding the regional town of Shashemane. The objective was to export large quantities of beef products to Europe and the USA. I think Fischer had expected my quick review and support so that AID/E and Harris could get on with things. Promotions of this type, especially from Fischer, usually came with the admonition that *time was of the essence*. But there was plenty to consider concerning this proposal: its technical and financial soundness and its impact on Ethiopian cattlemen. Foremost was the need to guard against an outbreak of rinderpest, which would threaten the health of the livestock, and foot-and-mouth disease, which would block sales to Europe and possibly elsewhere. Another factor coming into play was the Ethiopian cattlemen's fondness for their cattle. Typically, they value the *number* of cattle, rather than their *weight*, *health*, or *monetary worth*. It's a cultural

thing. Consequently, it was not obvious that the cattlemen, on whom the scheme depended would be willing to bring their livestock to the plant for slaughter on a regular basis. Harris also expected the Ethiopian government to invest in the scheme, so as to share in the profits, and, from his viewpoint, to lessen the financial risk.

I was jotting down such thoughts as I progressed through the 25-page report when I was jolted by the requirement that, if agreed to by the Government, the Harris group would have *exclusive right to the purchase of all cattle sold in the million hectares surrounding the plant.* I went back over the phrase several times just to make sure I was reading the inclusion correctly. But I was not mistaken. I checked with Tekalign to get his reaction, which supported mine: tying up cattle sales in this way *was not* in the country's interest. I then reported back to Fischer with my findings. Apparently, he had been so caught up in Harris's promotional talk that he had failed to understand what was being promoted. That was the end of that; however, not of Harris. He was to surface again.

By being in demand in the foregoing ways, my position in the country was more or less established. I simply had to make sure that I fulfilled my responsibilities for our project. And there were times when Clancy, rightfully questioned whether I was undertaking more than I could, *or should*, handle. Somehow, the word of my acceptance by the Ethiopians must have gotten back to Ernst because when our team would occasionally meet with him, he would not badger me as frequently as he did with the others.

But the honeymoon did not last long. One day Tekalign called Clancy and me into his office, where we found John as well. Apparently the two of them had been talking about our project responsibilities to produce at least twelve *feasibility* studies, not the various background studies and *pre-feasibility* studies we had produced or were currently working on. This shift in emphasis, we surmised later, must have come through the pressure put on Tekalign by the Inter-ministerial committee to which he reported. John, feeling responsible to the Ethiopian's for our project's performance, came down solidly in support of Tekalign's position—quite to our surprise because John had earlier accepted our work program and general approach. Clancy's response during this meeting was to look somewhat bewilderedly at me hoping I could somehow get us out of this jam. I tried as best I could by reminding both Tekalign and John that we had discussed all this many months ago and they had agreed with our approach. But to no avail. The overriding problem was that, by this time, we were so far into the project that we had little flexibility left, even had we

wanted to change. What surprised me the most, however, was the fierceness of Tekalign's challenge to me. Apparently, all of the work I had done for him and Planning Commission beyond the terms of our contract carried little weight. I didn't know where the pressure was coming from, other than someone to whom Tekalign reported.

Over the next several weeks, I met with AID's program officer, who was next in command below Ernest and the Deputy Director and Norm Wycoft, their resident economist, and both agreed with the position we had originally taken. Supporting us also was AID's Desk Officer for Ethiopia back in Washington, D.C. But we remained at loggerheads: Tekalign not budging from his position and John, somewhat shame-faced, hoping the problem would somehow go away and lamenting, "I thought SRI would be smarter than to let itself get into a bind like this." Clancy sat on the sidelines leaving me to continue my hapless discussions with Tekalign.

The issue eventually resolved itself (we really had no options at this late date when most of our resources had already been committed and we were into the eighteenth of our twenty-four-month contract) when Ato Ashenafi Sheferaw took over as the new General Manager and Tekalign moved over to head up the Awash Valley Authority. I doubt that this issue over what our project was to produce had anything to do with this change in Agency leadership, but it might have. The problem that now confronted us was the rumor that Ashenafi was anti-American! But this problem never materialized; and Ashenafi and I eventually developed a close relationship. Although Tekalign and Ashenafi respected my judgment on most issues, my international experience, and my education, I never lost sight of the fact that I was simply an advisor with minimal responsibility. They, on the other hand, had risen through the ranks, had attained considerable power via their positions in the government, and eventually (though I could not see it at the time) to rise to even higher positions.

In the midst of all this disagreement, I received a call from Lorraine, Ernst's secretary saying that he would like for me to stop by his office when it was convenient. Not exactly a command, but close to it. Wondering whether I had screwed up somehow, I entered his office with some trepidation. But when I saw the friendly smile on his face, which I had seen before but not often, I relaxed. Getting right to the point, he said that the Ethiopians liked my work and wanted me to stay on after our current contract was finished. The offer was for me to continue with the Tech Agency and help develop its abilities in economic analysis. Ernst told me that he had committed himself to stay in Ethiopia for six years, that he thought the country offered the United States a rare opportunity to improve the lives of Ethiopia's millions of inhabitants as well as calming a highly political region

of the continent, not to mention the contribution this would make towards our Cold War struggle with Russia. The offer and his confiding in me in this way came as a surprise given my recent arguments with Tekalign. I asked, "For how long?" And he said three years. Exhaling softly, I said I would have to think it over but that I was interested. This offer put me somewhat on the spot. Although we as a family had settled into a comfortable life style and had made several good friends, I had not yet thought of staying more than the contractual requirements of two years. Living in this far-away place had its draw backs both from a family standpoint and professionally with SRI. Still, as I pondered the possibility, I wanted to get into the economic development field and Ethiopia was as good a place to practice my trade as any—perhaps better than most given the country's needs and the government's openness to help from foreigners such as myself.

I broached the subject with Vicky, who was game; then with the children, who didn't mind at all. I was able to persuade SRI to grant me a two-year leave-of-absence, stopping short of the three-year target, then began negotiating a personal services contract with AID/E. Given I was cutting myself loose from SRI for two years, I thought my request to AID for nothing more than I had received under the SRI contract was modest enough. Ernst readily agreed. But when I turned to Delaney I encountered resistance. Provisions such as our ample commissary privileges, use of the Embassy (mail) pouch, RNR (time off for so-called Rest and Relaxation), and a few others granted by the Mission after tough negotiations with SRI's contract negotiators were seldom given to individual consultants, which was to be my status. Granting me such privileges would break president. So, Delaney said he would give my a lump-sum payment of \$2,000 or so in place of these privileges. I talked it over with Vicky who said, "Nothing doing! We should keep what we already have." In the end, we won out because I was in a good bargaining position: the Ethiopians had made the request, to which Ernst readily agreed, and I was ready to return to the States if we couldn't reach an agreement. The final arrangement was that I would report directly to Ashenafi under terms the two of us would work out and AID/E would simply be the financier. When I asked Ernst whether I should report to someone periodically he responded saying "The less contact you have with us the better. Just make sure you keep Ashenafi happy. Then, upon reflecting, he said, "Just give us a bi-annual report telling us what the Agency is doing. But do it jointly with him."

Thus, I was able to come up with a contract, which contained no better provisions than I had enjoyed under the SRI contract, but which the Contracts Officer opposed. Why? Because, it would undermine his dealings with others who would be negotiating with AID individually rather than through the contracting offices of organizations such as SRI. AID's contracting office argued,

"Why should individuals such as myself, receive most of the benefits AID personnel working overseas receive. Our salaries were higher, probably by twenty percent. Our counter argument was that we did not have job security (beyond the two or more years of our contract), we did not receive time off for training or educational courses, and we generally worked longer hours. However, such feelings among the rank and file of AID employees overseas were generally not strong. They seldom came up, except when a contract was on the line. The spread between what the SRI contract got for us and what other private contractors receive were a surprise and annoyance to Emer Broadbent, the short-term agricultural marketing specialist under our SRI contract. Later, under the next phase of my work in Ethiopia, Emer and his wife returned for a two-year contract with AID. Being the trusting Mormon that he was, he had assumed he would be treated the same as under the SRI contract. But he wasn't. He had found out that dealing with our government can be a hard-hearted business.

As the above dealings with Ernst were getting underway, Bredo sent me word that SRI had won the bidding on the water, transport, and agricultural portions of a large multi-sector study in Ghana and that I had been proposed to head up the agricultural part. Bob Brown of SRI was to be the team leader. I replied saying that I was interested, even though it meant not staying in Ethiopia. When I told Tekalign about my decision, he said he was disappointed and that, had he known, he could have made me a firm offer for my continued stay. Upon learning about my involvement in the proposed study, Ghana's ambassador to Ethiopia invited Vicky and me for lunch at his residence. That was where I was first pleasantly exposed to the use of peanuts as seasoning in salad dressings and sauces. As we sat among the Ghanians, we listen with interest as they described their country, its fun-loving people, the cookouts on the beach, and the music, called "high life," which we had only recently heard and had grown to like. It made it all sound delightful, which left Vicky and me torn between our desire over going there and staying in Ethiopia. The Ambassador kept me informed about events taking place in Ghana and occasionally invited Vicky and me to attend other Ghanian affairs in Addis, all to get to know us better and to prepare me for the upcoming assignment. But, things changed. Before long, Bredo told me that the Ghanians wouldn't accept me to head up agriculture (insightful on their part, I thought). So, SRI then proposed that I be Bob Brown's deputy. That was still fine with me, since I had gotten to know Bob through his interest in and knowledge of economic development and through his briefings about Spain prior to our trip there. In the end, none of this mattered. SRI lost the bid and our images of going to Ghana evaporated. We then returned to our plans for remaining in Addis.

Throughout these weeks of discussions and negotiations, John had balked when Ernst had asked him to facilitate my further stay in Ethiopia. He had even warned me not to sign a contract with AID/E or to trust what Ernst had promised me. I never found out what motivated John to act this way. Possibly, John thought I was a trouble-maker because of my conflict with Clancy or my strong disagreement with Tekalign over the *pre-feasibility* issue. Or, possibly it was because John had gotten on the wrong side of Ernst and had grown to dislike him. Earlier, John had testified before Congress on behalf of aid to Africa and it is just possible that he was vying for Ernst's position—not out of character for John. In any case, John soon left and was replaced by a competent, young agricultural economist, whom Ernst had known in South Korea, by the name of Lane Holdcroft. Years later, John and I met in Washington, D.C. when he was temporarily out of a job. Soon thereafter he became the Executive Director of the Consortium for International Development, and our association continued, not only there but later in Swaziland. But I'm getting ahead of myself. The upshot, however, was that I ignored John's advice, which was just as well, for all turned out well with both AID/E and the Tech Agency.

With my work and future coming together nicely, Vicky and I decided that we had better take advantage of the RNR coming to us or we might lose it. So, we planned a eleven-day trip to Kenya. Somehow we were able to book passage on the military transport service (MTS) flight to Nairobi. The interesting part was sitting in bucket seats that lined each side of the fuselage. The trip was not long so that this minor discomfort did not bother any of our family. The airport was set up to accommodate the many tourists visiting Kenya, primarily for its game parks. At the entrance into the terminal we passed through smartly dressed military guards with elephant tusks, zebra skins, and arrows lining the doorway. Our passage through customs was easy; we then rented a small, left-hand drive English Ford and found our way to the Fairview Hotel near the center of town just a few blocks up a hill from Jomo Kenyata Boulevard, the main thoroughfare in and out of the city. The Fairview was a rambling, clapboard, two-story hotel of the colonial area set amidst acres of green lawns, shrubs, tall eucalyptus, walking paths, and large cages of colorful birds. While the setting was pleasant, we noticed as we checked in that the native Kenyans who managed the place would not look us directly in the eye. The bellhops and others waiting on the hotel's guests were also distant. Quite distinct frm the open friendliness of the Ethiopians. While this might have been customary politeness, it more likely was a hangover from British colonial days. So, while the Kenyans had the so-called benefits of colonization, i.e., modern infrastructure, economic development, and a trained civil service, it suffered from having been subjugated for so many years. Vicky and I decided that Ethiopia was better off in this regard.

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During our short stay at the Fairview, we strolled the city streets with its many shops, including those operated by the sizable Indian community that had settled in the city many years ago. We also went to the game park only a few miles beyond the city's borders on the road to the international airport. We paid a modest fee at the entrance then arranged for a guide to help search out places where the more interesting game were likely to be. Our guide, typical of most, was perhaps fifty, dark as most Kenyans are, with dangling ear lobes in which he had inserted small Kodak canisters. Occasionally we saw lobes that had split in two from having been stretched so much. A sturdy 12-foot high chainlink fence had been installed to safeguard the city's residents safe from the predators, or so we hoped. Even so, we heard of about a family living on the outskirts of town in which a lion had gotten over an eight-foot corral fence, killed a young calf, then with the calf in its jaws climbed back over the fence to make its get-away. The point of this story was to emphasize the strength of these kitten-looking felines.

Once away from the main entrance we saw an abundance of impala, gazelle, horse-like wildebeest with their short vertical horns, the slump-backed hartebeest (gnus), and giraffes, a few wart hogs, an occasional hyena, and a limited population of lions and chaeta. Outstanding was the sight of long-legged giraffes strolling in front of us down the macadam road looking two stories tall; as we saw more of them we noted the variety of markings in their brown, cream, and black coats. And how they had to spread their forelegs wide apart when feeding off low-lying shrubs. Or, the thrill of cutting off the smooth park roads to follow a group of chaeta stalking their prey. One would sit on its haunches, back ramrod straight looking ahead and not moving for minutes at a time. Others in the group, however were more relaxed and gave evidence of familiarity with game-park visitors. One time we were among a dozen or so vehicles parked in a semicircle viewing their hunt. As we silently sat and watched first one chaeta hopped onto the hood of one of the cars, then another climbed onto the cab of a pickup, its tail falling down beside the driver's open window. We were lucky enough to view a pride of lions off the side of the road. On another occasion we came upon an old male lion resting on a earth mound right alongside side of the road. We were so close that we could see the flies crawling across its muzzle. We were not to be fooled by the docile look of these so-called "king of the jungle," for we had heard the sad story of a father who, having to relieve himself, got out of the car in a wide open area only to be attacked and killed by a lion hiding in the tall grass. This happening in full view of his horrified family. On this outing we didn't see elephants, buffalo, leopard, or rhinoceros, which are the other members of the major five. For this we had to go elsewhere. Thus, we played the typical tourist, except that we had our own

transportation, nor did we dress up in safari clothes as one might see entering a zebra-striped minivan stopped in front of the renown Stanley Hotel, or sitting at the hotel's outdoor tables of its Thorn Tree restaurant—a thriving gathering point for tourists, with its message board filled with rendevous notes.

We checked out of our hotel and drove on the paved and well maintained highway towards the coastal town of Mombasa with the game park at Tsavo as our destination. Rather than check into the tourist hotel within the park, we stayed just west of there in a truckers' motel that offered accommodations similar to those we would find in the States. This was where we saw an abundance of elephants. One day during our search for them, we encountered a huge bull that must have stood eleven feet tall, with long tusks standing 50 yards from a tee in the road. As we approached him, he wagged his head from side to side while flapping his ears and stamping his feet. After several minutes of this, when we failed to move, he got onto the road and began chasing us. We were able to safely keep in front of him, while acknowledging that elephants are capable of running much faster than one might expect. I asked Vicky to take a picture of him chasing us. After both of us had stopped, I asked "Did you get it?" "I'm not sure," she replied, "I think I was too nervous." So, I backed up slowly until he began the chase again. Mind you, this was not as easy as one might think because I had to operate the gear shift on the steering wheel with my left hand instead of with my right as with a right-hand drive. Also, the position of the gears is not the same. Had the bull caught up with us, he could probably have done considerable damage to our light-weight car with us in it. Still, with confidence, we repeated this operation several times until Vicky finally assured me that she had taken several good shots. Meanwhile, the children in the backseat were whimpering and pleading for us to get away. Not one of my finer moments.

Later, that day, we saw another bull elephant. This one was equally as large, but much older by the looks of his wrinkled skin and partly broken tusks; his ears were torn in several places, which must have been the legacy of past fights. This one was docile, paying little attention to us. So, we drove to within 30 yards of him and sat waiting. Before long, we saw three young elephants approach him in single file. The first went up to the old bull, bowed its head, then the two entwined their tusks and proceeded to wrap their trunks together. After briefly holding this position, the two unwrapped their trunks and the younger elephant lowering its head and slowly backed away. This formality, which had to be a form of greeting combined with respect, was repeated by each of the other two elephants. What a sight! Seeing this made us wonder just how rich elephant culture must be. A less threatening place in the park was the popular Nzima springs, a bush and tree shrouded oasis with its crystal-clear, bubbling waters where one can see hippos lounging both above

and below the surface. As we got out of our car spider monkeys came up to us expecting food. One couple there had just been bitten on the forearm. Although the wound was not deep, rabies is always a worry.

From Tsavo we continued our drive to the coast, overnighting in Mombasa. The next morning, we headed north along to the coast to the Sun and Sand, a resort where Vicky had made reservations back in Addis. The tour agent told her that she did not know much about the place, that it had only been listed with them recently. But she thought it might suit us, since it was only about 30 miles north of Mombasa and the photos of the place showed a lovely beach with cabins set amid palm groves. Moreover, the place run by a retired English couple said they catered to families. We had some difficulty in finding the place, since those we had quarried before leaving Mombasa said they had not heard of the place. So, as we drove along the coastal road we kept our eyes open for some well-marked entrance. Eventually, we spied a small sign by the side of the road next to a small road through a tunnel of over-arching trees. After following the road for a quarter of a mile, I asked Vicky, "Are you sure this is the place?" "Yes," she replied saying, "The sign said Sun and Sand, so this must be it." Shortly we came to a small rise in the road and on the down-hill side we could see an opening with a gate leading to a large open area bordered by small cabins and a reception area off to the side. This was it.

The place was as advertized: lovely white beach, abundant palm trees set amidst a broad, expansive lawn, and the friendly elderly couple who ran the place. The sea was enticing, the weather balmy with the off-shore breezes, the food great, and our two modest-sized cabins perfect for the six of us. What is more, we practically had the place to ourselves! Only two other couples occupied cabins some distance from us. The beach was perhaps twenty yards wide that ended with grassy tufts on one side and a long expanse of shallow water filled with all sorts of interesting items. One morning when I went wading by my self, I was perhaps fifty feet from shore when I happened to look down through the clear water and saw what I thought were several short, thick snakes resting on the bottom. Now, I'm not overly afraid of snakes, but water snakes are something else. So I remained still for some time, then finally decided to slowly inch my way back to the shore. When I described my experience to the resort operators, they grinned and told me what I had seen were simply sea cucumbers and completely harmless. What was not so harmless were the many sea urchins that I had also walked amidst in my bare feet. If stepped on, their many prickly spines can break off in one's foot thereby causing a painful wound. It was also here that we were made aware of the dangers of the sea, especially the many poisonous shell, such as the cone shell or geography

shell with their enticing patterns, that can even be fatal. Even so, the potential danger did not keep us from enjoying the water. It just made us more cautious. Later, we found out later that this resort, which was indeed under new management, had formerly been a brothel! So, that explained the strange looks we received in Mombasa when we asked directions to the place.

We closed out our two-week vacation by turning off the main road short of Nairobi and heading towards Amboseli, where we had booked reservations in their tent camp. The site was a large open area set amidst a sea of light straw-colored grass typical of East Africa. The walkways were neatly kept gravel lined with small rock and occasional flowers. As we emerged from our car we looked off to the south for a glimpse of Mt. Kilimanjaro just across the border in Tanzania. We had been warned that the snow-covered top was frequently shrouded in clouds. So, the cloud bank we saw on the horizon rising above the upward slopes of land mass did not surprise us. It was not until we raised our eyes abruptly to what seemed like an unreasonable 45 degree angle did we see resting high above the clouds the broad white expanse of the 19,000' summit some 15,000' above the surrounding plains. The game here were not as abundant as at the game parks at Tsavo or outside Nairobi. However, it was here that we got our first close-up view of a large rhino with her calf standing on a salt flat no more than one hundred yards away. The impressive thing about these seemingly prehistoric animals is the way they can move so swiftly with so little motion. The body seems to glide as if floating on water propelled with just the flick of its four short legs.

Our mornings would begin with two trays each with a pot of tea, hot milk, toast, and marmalade inserted between the folds in the back compartment of our two tents. The camp prepared sack lunches for us that we could eat during mid-day while away from camp. The evenings were topped off by an elegant meal of some wild game and accompaniments served within a large tent in which our tables were covered with white table clothes on which were heavy silverware and a camp lantern set in the middle. Shades of Ernest Hemingway's *The Snows of Kilimanjaro*. All quite exhilarating. Our kids were thrilled, as were Vicky and I.

We returned to Addis looking forward to spending more time in Ethiopia and I to our project. By now it was early August and I suddenly realized that the remaining time under our contract was limited. We needed to begin wrapping up the work of our short-term consultants and begin planning for our final report. When I approached Clancy about my concern, he smiled in his avuncular way and said, "There's no problem. We will simply summarize the consultants' reports that are being produced, put these into some overall framework, and that will be it." I was shocked

at such a cavalier way of addressing our two-years' effort. Certainly, I thought, much needed to be said about the future of agriculture in Ethiopia, the opportunity this sector provides for investment, the contribution that investment would make to the country's five-year plan, and other insights gained through our two years in-country. Thinking back to the two-volume report we wrote on the five-month study of the Spanish petroleum industry, I envisaged, not a proportionally large report resulting from our work, but certainly more than the minimal effort Clancy seemed to have in mind. But I had grown weary trying to persuade Clancy to my way of thinking, so I just settled in to looking after the studies and reports for which I was responsible. To help in these last months, as our consultants began churning out their reports, Bredo dispatched Dick Meier, one of SRI's seasoned editors, who would spend several months helping the rest of us in getting these reports ready for publication. He also helped us think through the format and content of our final report.

Part of our routine was for Clancy to send drafts of our reports to John, as AID's prime contact, before exposing them to the Ethiopians and from there to be edited and finalized. John had within his small group a gifted editor by the name of Red Youngstad, who I expected to review our reports. So, it came as somewhat of a surprise when Mal Novins called me into his office and handed me back a report of mine that he had just finished reviewing at John's request. Mal was a marketing specialist from New Jersey who had once been a commercial chicken farmer. He was tall, heavy, seemingly out-of-shape, jovial, gregarious, and a Jew-of sorts. Invariably he seemed to showed up where the action was, sometimes playing the bongos with more gusto than ability. Although he sometimes acted as though he had had too much to drink, I never saw him inebriated. One of the stories liked to tell about him and his wife, Dinky, occurred as they sailed into Haifa on their way to Ethiopia for the first time. It was dusk and they stood close together leaning on the ship's railing. All caught up with the sight of Haifa's many blinking lights, Dinky effused, "Mal, just look there. What do you see?" And Mel, responded, "More g-d Jews than I've ever seen in my life!:" Surprised by the insult to her enthusiasm over their soon-to-be stopover in the land of their religion, she stomped away, leaving Mal to wonder about his smart aleck remark. But the incident must not have been too damaging to their relationship, since Mal loved to tell the story on himself. Being the carefree type that he was, I never took him over seriously. So, he took me by surprise one day when he handed me back one of my reports that John had given to him to review. He had penciled in the margin my draft, *split infinitive*! Not something one would expect from a frivolous chicken farmer from New Jersey. Now, after having survived the WAC graders at HBS and SRI's demanding editors, I thought I could write. So, being accused of splitting an infinitive came as a shock, especially since I had to go to a book on grammar first to see what I had done and second to see if the criticism was important. Since then, I've learned from Fowler and Bernstein that the error

can be excused. Even so, from that day onward, I viewed Mal in a slightly different light. To my defense, Winston Churchill rebelling against the strict application of this restriction was reported to have said something like, "That is a rule with which I will not put up."

About this time, things began falling apart. Schwarz was having marital problems evidenced by the stories making the rounds that Judy was having affairs, first with a dentist by the incredulous name of Yankavic and then with one of the American entrepreneurs seeking to find a foothold via some project in Ethiopia. While we paid little attention to such gossip, the credibility of such possibilities was enhanced when Bill said that Judy told him, "This is our year for separate vacations." Disgruntled over his domestic affairs, Bill was also piqued by not having received a salary increase since his arrival. He told us that he had told Bredo, "If I don't receive an increase by the end of August, I'm leaving." Bill was also struggling with his writing. Looking at Bill's draft of the market for vegetables in Europe, Meier tells me that the draft is "hopeless." Then, shortly before Bill is scheduled to depart, the draft of his final report somehow gets burned up in a small fire next to our copying room. After this calamity, Bill gave up and left in mid-December saying he had to return home to look after his ailing mother-in-law. By contrast, Jerry's professionalism took over whereby he set out to finalized the reports of two of the consultants for which he was responsible. Once that was done, he slacked off, feeling his responsibilities for the project were over. Seeing Clancy reading Time magazine and the Farm Journal during the morning hours annoyed Jerry to the point of saying, "Why should I knock myself out, when our chief of party does nothing?" Jerry must have confronted Clancy on this or some other issue because we soon heard Jerry accusing Clancy of having lied to him. Given Jerry's seething annoyance and physical strength, Clancy may have feared for his body, if not his life. As a result, Clancy started staying at home in the afternoons thereby avoiding a confrontation, or so we surmised. While Ray was able to stay clear of the problems created by Schwarz, Jerry, and Clancy, he ended up telling Meier that the tension wafting about our office was demoralizing.

Bredo must have gotten wind of our squabbles, possibly through Meier or John for I had learned to keep my thoughts to myself. In any case, Bredo sent over Bob Brown to help us begin putting our final report together. Bob was also a Harvard PhD in economics and respected at Menlo; also, he and I had talked at length about his infatuation with Spain prior to my assignment there. So, I was happy to have Bob join our team, especially because of the long discussions we had had about economic development and the problems of third-world countries. Thus, it came as a disappointment when Bob failed to help us much. Rather than carve out a segment of our work

load, either helping to finalize the many consultants' reports in the mill or getting our final report under way, Bob would sit in my office content to discuss generalities or to do the same with Clancy. Before long, he and Clancy were taking two to three hour, two-martini lunch breaks at the Ghion, after which Bob would head for his hotel and Clancy for home. I didn't know it, but by the time he arrived on-scene, Bob had become an alcoholic. Not long thereafter, Bob left SRI for the World Bank, an assignment that didn't pan out.

During this time Bredo came over for one last look at how things were going. He met with each of us and during my session with him I reiterated my frustration at not being able to get Clancy fired up about our final report. Ray must have said something similar. And Jerry and Schwarz (who had not left yet) could not have painted a pretty picture about how things were going. The net result was that Bredo brought us all together where, instead of getting after Clancy as we had hoped, came down hard on the rest of us saying we were undercutting Clancy's position as team leader. Given past experiences, I might have expected this; even so, we felt chastised and let down once more. By mid-December Jerry and Schwarz had left, neither one contributing to our final report. Still, Clancy tells Ray, Meier, and me that he hopes to have our final report completed by the time we leave in mid-February so that we can all take vacations on our way back to Menlo Park. By this time I had written Clancy off as being disillusioned.

Things calmed down once Schwarz and Jerry had left and the three of us, with Meier's help, were able to make progress in finalizing the consultants' reports. But the final report remained to be done. By the first of February the other three had left for home on a trip that included vacations in Europe and elsewhere. I stayed on for three more weeks before heading back without the family. At one point, Bredo was insisting that the whole family return with me. But with AID's help we were able to override that decision. During this time, I finalized my contract with AID, moved into my new Tech Agency office (a new, modern, seven-story building closer to the center of town), and otherwise prepared for our extended stay in Ethiopia.

Clancy and Ray were already back in Menlo Park by the time I returned. Bredo had assembled several SRI "heavy-weights" to help Clancy, Ray, and me write our final report; Meiers with a few of the consultants who had been to Ethiopia worked to finalize these reports. My frustrations with Clancy continued, for he was *never* able to buckle down and work in the way I thought necessary to speed up the completion of our responsibilities. So, after two months of hit-and-miss effort we finally completed the drafts of our reports, had them edited, and had turned

them over to Bredo for printing and distribution. We had produced eight *pre-feasibility* studies, e.g., Desset irrigation, a commercial feedlot, and solvent extraction from oil cake--with estimated rates of return of an acceptable level. These were the so-called "bankable" projects that John had in mind when he first described our assignment to us. Supporting agriculture in general were ten other studies, such as agricultural credit and fertilizer demand. Then there was the RAM study, which was really a more of a trial run (albeit costly) of an untried methodology than a realistic approach to agricultural development. Our final report of 370 pages included sections on the goals and design of a national development strategy, the basis for our selection of projects with suggestions for their implementation, and brief summaries of each. A few months later this "library" of documents arrived in Addis without much fanfare. And, although I had close contact with the Ethiopians and AID officials most involved with our work, I don't recall their interest in what we had produced other than the delivery of these reports. Perhaps the most revealing sign of their lack of interest was that SRI was never asked for additional information about these reports, nor did it receive any further work in

Ethiopia.

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Chapter 6: Ethiopia-Part II

Vicky and the children were waiting for me at the airport in Addis when I returned from Menlo Park. The sky was clear, the weather balmy, much as the day when we first arrived. But the touch of dampness in the air suggested the possibility of rain from the scattered, fluffy clouds. For this was the middle of the season known locally as the small rains. It had been a long time since we had been separated for as long as two months. So, we stayed up late catching up on news from our neighborhood back home and goings on in Addis. On way back to Ethiopia, I took advantage of AID policy, which allowed a day's rest in route by stopping in London. As I walked down the breeze way to get to passport control, I noted a phalanx of reporters taking pictures, the flash lights blinding my eyes. But I paid little attention about why this was happening. I was soon to find out. As I waited in line at the control desk, I recognized the young lady immediately in front of me as the one whose seat was in front of me on our overnight flight. I asked the fellow standing next to me if he knew whether this trim, 5'-6" young lady might be a starlet, for we had stopped in LA on the first leg of our flight from San Francisco. Incredulously, he whispered, "My God, man, that's Raquel Welsh!" who, at the time was in the height of her popularity as a sex symbol. We had lived out of the country long enough to have missed these sorts of things. When I realized who it was, I was amazed at how *small* she was. The few posters I had seen of her made her look six feet tall with the broad shoulders of a fullback. Then, I recalled the night before as we were taking our seats that there had been some confusion involving her and the fellow who must have been her agent. It seems that he had booked first-class seats for themselves, but the flight attendant said that was not so, that there were none available. Who knows? But to Welsh's credit, she made no fuss, as one might think typical of a superstars. Later, I would jokingly brag how I had spent the night sleeping next to Raquel Welsh.

Now, back in Addis with a commitment to work for the next two years I continued much as before—same office in the Tech Agency, same colleagues there, same type of work although

broader in scope, same home, same golfing and social friends, and same schooling for our kids. Yet, the work situation was considerably different. I now reported directly to Ashenafi, Fischer was no longer in the picture, and AID's presence was much reduced. My main contact with AID would be the bi-annual reports Ernst had suggested. These became little more than formalities, since none of them drew any response. So, I no longer had to contend with Clancy, Schwarz, or Marousek, or dictates from Bredo. Nor did I have the "Sword of Damocles" hanging over my head, that is, the need to produce a meaningful final report when all of our Addis team, save Ray Borton, were cavalier about the task. I became the sole States-side employee with the Agency (until the arrival of Lowenberg), my associates broadened to include Colin Bruce, a high-ranking World Bank official seconded to the Planning Commission, as well as Harvard's Development Advisory Service's team. Thus, I had entered the world of international development, which had been my desire all along.

But, the change was to be more significant than I could foresee. Within eight months Bredo was to renege on my two-year leave of absence. He had landed a large contract in Saudi Arabia and SRI needed "bodies" willing to live in that austere country. Vicky was against the idea, since we would be forced to send Becky and Tim off to school in Europe. Moreover, she didn't like the restrictions the government placed on women. I was easy to convince, since I had given AID and the Ethiopians my word that I would stay for the next two years. Bredo fired back that if I refused the assignment my association with SRI would be terminated. By then, I had felt it time to move on, so his threat was easily parried. All of a sudden I found myself a free agent.

The Technical Agency was now my abode and Ashenafi my boss. As his personal advisor my professional welfare depended on serving him well. Although the Agency was small and the expertise of its staff limited, it occupied a pivotal spot within the government. This came about because the Planning Commission turned to the Agency when considering the wide variety of investment opportunities being considered by the government. Ashenafi as the Agency's Director General (a position just below that of Vice Minister) was both charismatic and

effective, as was Tekalign before him. And Belay Abay, the highly respected head of the Planning Commission, was to whom Ashenafi reported. Moreover Belay had close connections with the Prime Minister, who in turn reported to His Excellency Haile Selassie. In short the Agency enjoyed considerable influence when it came to development projects, which was my forte.

As a result, life was good for me and the family. We now lived in an elegant three-story house complete with chandlers, fraise-bordered living room, and a marble staircase. Vicky, at her finest, had negotiated the deal with a landlord who said he was tired of renting to the embassy crowd because they hadn't taken care of the house, and therefore was willing to bring the rent down to the \$800 per month allowed us by AID. The deal was so good that Schneider, as the Executive Officer responsible for monitoring such arrangements, moved into the house as soon as we returned to the States.

Vicky had her circle of friends; we played golf, she worked with both the Cub Scouts and Girl Scouts. We had a pleasant, refined Ethiopian lady, Workuha, who cleaned the house and helped around the kitchen. She, in turn as is common, had her own maid to help around her house and to look after her children while she was gone. We also had a day guard, Gebre Christos who took care of the yard and the flower garden, and a night guard, Mukria, who chopped wood for our fireplace. We had even acquired a fox terrier from a departing family and a Siamese kitten from one of Becky's friends. Typically Vicky and I were invited to some sort cocktail party twice a week. And although my work week ran till 1:00 p.m. on Saturdays, I was still able to get in two eighteen-hole rounds of golf on the weekends, except during the "big rains," of course. When not playing golf we as a family would sometimes take off for Sodere. Making the two-hour trip there, particularly towards the end of the rainy season was a welcome relief from the damp, chilly days in Addis. Sometimes we would continue further south to spend a long weekend in one of the rustic resorts of the lake country. Besides these local adventures, we took advantage of USAID's R&R policy with trips to the States, the Seychelles, and Greece

At the American Community School, about a mile past the golf course, Becky got invited to her first dance and participated in a fashion show; Tim played basketball and went on an occasional weekend with the Scouts; and Mike and Paul had their African friends, Dinga and Vusy Dubé. Vicky taught typing and golf during summer school and I captained our golf team. I also served on the school board for over two years, ending up as its secretary and being the longest serving member. The latter came about simply due to the high turnover of expatriates. Just a full, active, interesting life for all of us not unlike what one might find back home, but with the advantage that being expatriates with common interests, we were more of a closely-knit group than occurs in the States.

The Agency's staff comprised Mamo Bahta, Waldu Gebre Michael, Paulos Abraham, and John Asfaw. Duri Mohamed continued as well, but only part-time. Sheferrew Jammo soon joined the group bringing with him experience and education similar that of Bahta and Waldu. Other than Duri Mohamed, none of this staff held graduate degrees, although, some had received short-term graduate-level training abroad. Rounding out the Ethiopia staff was Ibrahim Yousef, who had recently graduated from Haile Selassie I University. Buttressing this relatively young Ethiopian staff were Bogdanovic and Sodnic—two Yugoslavs who had quietly worked for the Agency for years. Commodor Rawse continued as an occasional advisor, but without receiving any substantive assignments. I got along reasonably with all these "lieutenants" with the exception of Sheferrew, who frequently offered counter arguments to my suggestions. Thus, I was not entirely surprised when, occupying his office because mine was being repainted, I found Mao's Little Red Book in his desk drawer. He had never openly professed interest in Marxism, but perhaps he didn't think much of capitalism.

Adding to the Agency's capabilities theoretically at least, was the Battelle group. This contingent of five Germans was housed just above our offices. It's headquarters were in Frankfurt and funded by GTZ–Germany's international assistance agency comparable to AID. Although their team leaders reported to Ashenafi, they pretty well ran their own show. At my

first meeting with Magdalener, the team leader, he said that his group was interested in implementing some of the projects SRI had identified. Eventually, through my discussions with their leadership (Magdalener, followed by Bendow, and finally Golkovsky) I sensed that they felt that because the Ethiopians were incompetent they would be were better served if GTZ did its own thing. This, of course, rankled Ashenafi, who once got so annoyed that he asked me whether he should just tell the group to pack up and go home. Battelle, for its part, feeling the animosity and lack of meaningful input to the Agency told me it wanted to be moved to the Planning Commission. But this never happen. Seeing how such animosity thwarted Battelle's effectiveness reinforced the approach I had taken in dealing with the Ethiopians, which was go accept what they wanted to do, then see how best to help them. In the process I tried to convey technical and management concepts that I had learned at Harvard, Stanford, and SRI. I certainly did not want to promote State Department policies, such as "Buy American." Instead, my interests centered on economic development in general and Ethiopia's needs in particular. I would have drawn the line had Tech Agency leadership ever asked me to do something unethical, but that never did. Shortly before I left Ethiopia, Golkovsky took over. Being of a milder and more cooperative nature relations with the Agency improved. Years later I was to met Golkovsky in Wash DC who by then was working with the World Bank.

One day, Ashenafi brought a young Ethiopia to my office named Zewdie Abate, who was seeking employment in Addis. He had recently returned from Haifa where he had received his master's degree in water resources engineering through a collaborative program between Israel and Ethiopia. Eventually, our discussion turned to the intricacies of benefit-cost analysis. When I explained the procedures I had instituted for the Agency, I was surprised when he said I was wrong. Yet, here he was at the Agency seeking employment. Eventually, I grew tired of the what I considered his stubbornness, got up, took him by the elbow, and ushered him out the door. This was one of only a few times I had lost my patience with an Ethiopian.

Just as Tekalign impressed one as being bright, refined, intense, and almost delicate because of his size and manners, Ashenafi was large for an Ethiopian, standing over six feet tall

and weighing around two hundred pounds. He was self-assured, courageous, ambitious, and plenty smart. One of my first assignments after my return was to read over several SATEC¹ documents in preparation for an important meeting Ashenafi was to have with the Ministers of Finance, Planning, Public Works, Industry, and Community Development concerning development of the Awassa farms, located in the southern lake region. Ashenafi asked me to accompany him to the meeting, where within a couple of hours he was to give technical advice on this proposal. Once in the car and on our way, I told Ashenafi that I hadn't had enough time to read the documents, let alone understand the issues. Showing little concern, he said, "We'll just listen to their questions and respond appropriately. As a DG his position was considerably below that of the ministers with whom he was soon to meet. Perhaps his confidence came from his prowess as an athlete. (Knipp, a professor on sabbatical from Kent State University and a member of our golf club had told me that Ashenafi's basketball coach there had said that Ashenafi was one of the best centers he had ever had.) More likely, his confidence came from his being a member of the royal family. Though this fact was not widely talked about, still, it was no secret that his father owned a large farm in the Awash Valley--one of the privileges commonly associated with royalty. Whether he was royalty or not, he acted the part. A book about Haile Selassie's regime and possible successors had been banned from public view. But Ashenafi had a copy inside the glass encased bookshelf directly behind his desk with the title clearly visible. All of which made working for him exciting and helped explain his cavalier attitude in meeting with this August group of ministers. Ashenafi's strength of character at times put me in a bind. This came about as a result of Belay's occasional request that I work with others in the Planning Commission on some activity that did not involve the Agency. More than once, Ashenafi told me not to let Belay impinge on my time-even though the Agency served at the Planning Commissioner's pleasure. How much Ashenafi was guarding his responsibilities as director of the Agency or simply didn't want someone else usurping his authority, I didn't know. The work I did for Belay I did quietly and on the side.

¹ France's Development Agency.

Even so, I enjoyed working with Ashenafi, in part because I was able to sit in on after-hours sessions, partly in Amharic and partly in English. Having taken one hundred hours of Amharic instructions at the AID office, I was able to grasp parts of the conversation, but only part. Vicky, who took the lessons with me, was much more proficient being able to bargain with the merchants in Addis's large open market whenever she accompanied visitors who wanted to shop there. I thought it more important for me to focus on the technical side of my job rather than spend the required hours learn the language. But I doubt that would have made much difference. Besides, most of those I dealt with spoke English. Ashenafi would often host other young Turks in his office after quitting time. One of these was Asnake, a dapper young man who was head of Ethiopia's Coffee Board that included holding the rotating chairmanship of the international organization headquarters in London. Another was Tsedala from Tourism and the daughter Yilma Deressa, the powerful Finance Minister. During these sessions, which often lasted past 9:00, they would talk about the health of the economy, where it was headed, and who might succeed the Emperor who was now in his late seventies. All felt that the Crown Prince, Asfaw Wossen, a step-son and heir apparent, was too weak of character to be accepted either by the people or the military.

It was during these long, unanticipated sessions with Vicky patiently waiting for me outside in our VW station wagon, that persuade us to buy a second car. We searched the used car market and bought a Fiat *secento* (six horsepower). On my first trip to the office, I suddenly realized that the road I took to the office had a slight rise to it as the car struggled to make it up this slight grade. The car was about the size of the old British Austin, but less sturdy. Although small, it had a cramped back seat and even a small storage area behind that, but no trunk. Even so, we once crowed eight small boys back there just to see how many would fit. The upside of owning such a car was that the many local Italians would smile as they looked down at me, either from another car or while walking. I figured they felt I must be one of them. Even more so, when the Fiat's alternator needed repair, the Italian shop owner who took it apart and rewound it, charged me the equivalent of \$2.50. Such treatment reinforced my belief that the Italians are great colonists. They marry into the society, live modestly, and often run good

restaurants, modest hotels, and efficient repair shops. By going to an Italian barbershop in town I was able to learn a few words as well.

Being able to sit in on these private sessions reinforced my position within the Agency and gave me unsolicited influence over its dealings with other agencies-even AID. Once, when Gene Sullivan, AID's chief enterprise officer, was describing how AID might assist the Tech Agency, Ashenafi looked away to show his lack of interest, an expression Sullivan did not pick up. After they left Ashenafi asked me, "Should I trust him?" I don't recall what he was proposing, but Ashenafi told me later that he didn't like his blunt way of doing things. That Ashenafi related such feelings gave me a surge of confidence that he should rely on my judgment over a high ranking AID official. While all this was positive, about once every nine months, Ashenafi would get down on all consultants and imply that their Government was doing us all a favor by employing us—as though we could not find work elsewhere. Then, I would feel discouraged. Nor did I like it when he would ask me to review some consultant's report, instructing me to look for the errors and omissions, which I thought misguided. Rather, I thought it more constructive to look for the useful information contained in the report. Still, he had a point. Errors, especially when dealing with an unfamiliar consultant, can undermine his credibility. Years later in Swaziland, a consultant lost credibility when didn't know that local farmers refrained from using herbicide because they harvested the edible weeds, much as some people here in the USA are fond of dandelion greens. This oversight suggested that the consultant didn't know local practices very well, which diminished the credibility of his recommendations.

A sad note on Gene was that he died shortly after this meeting, from an aggressive form of malaria, which he caught on trip to Dire Dawa. Gene had spent years abroad with AID in malaria-infested areas without taking the recommended prophylactic, which led him to believe he somehow was immune. One morning he decided to stay home from work thinking he had a touch of the flu. When on the third day the symptoms grew worse, he decided to see the Embassy doctor who correctly diagnosed the problem. They flew Gene to the Cagnew hospital

in Asmara and, after being there only a few days, died. This event reinforced our resolve to continue taking our weekly dose of Cholorquine. But we had never thought of taking this risk. We knew that prolonged use might damage the eyes, which in my case did surface later when I developed retina damage in one of my eyes. However, that might have occurred anyway because my dad had eye problems.

Tsedale likewise could be critical of consultants, but in an understandable way. More than once, she told me that she didn't like either consultants or missionaries coming to Ethiopia out of the goodness of their hearts. She felt it degrading; and rightfully so, although one might accuse me of being so motivated. This, I kept to myself. But being privy to these thoughts was reassuring. So was the time that Ashenafi invited Vicky and me to a barbecue at his father's ranch near Nazareth in Awash Valley. To get there, we left the main road and traveled a considerable distance on a gravel, one-lane path to the family's ranch-style home set amidst a large enclosed yard. Tables and chairs were set out, some under acacia or next to shrubs. What grass there was showed the absence of care. This area gave the impression of a hard-scrabble farmer rather than one of royalty and wealth. The crowd of about one hundred comprised Yilma Deressa, Belay Abay, and what I surmised were the principle ministers in the Government. They were scattered around the area in small groups talking earnestly. While not fully understanding their conversations, which were in Amharic, I surmised they dealt with matters of government. Ashenafi greeted us as we entered then proceeded to direct us to those whom I might know. We surely must have met his father, and possibly his mother, because women occupied positions of respect within the culture. But, I don't recall this happening. What stands out in my memory was the presence of Themi Marinos, the Greek marine transportation advisor with the Planning Commission. We were told that he had been a senior resistance officer who was smuggled ashore in a dinghy in the middle of the night to join in the fight against the Germans during WW-II. Vicky and I were the only two other Caucasians there. We felt the honor of having been invited.

Ashenafi also invited Vicky and me to his wedding dinner. The event that lasted well past midnight, took place in a barn-like building used for large gatherings just up the street from our former offices at the Arat Kilo. Perhaps a thousand were present, seated at tables of six or eight placed directly on the sawdust covered floor. This time, those attending were made up of a cross-section of the Addis community, including those from the Government, United Nations, Embassies, and family friends. Ashenafi and his bride were seated on a low platform located midway along the length of the building. After drinks had been served the main meal arrived. To our great surprise, we saw two Ethiopians in traditional dress carrying ten-foot poles over which huge slabs of raw beef were draped. As the two stopped at each table, the guests were expected to point to the portion of the slab each wanted. Then, a third attendant would carve off a large chunk and place it on the guest's plate. Another attendant followed with dishes of spices used to flavor the raw beef. A giant beef tartar! As explanation, Ethiopians are noted for their fondness of raw beef. What added zest to this meal was the prevalence of tapeworm among the country's cattle. With this in mind Vicky and I decided to feast on lentils and other cooked dishes, thereby risking affronting custom but not our health. Those at our table, understood foreigners' aversion to this national dish and so were sympathetic. We knew other foreigners who did eat raw beef. Noted among them was a young Swedish couple who relished raw beef. They paid the price periodically by coming down with the worm, taking medicinal arsenic that pretty well devastates the body, recuperating, then eating raw beef again.

About halfway through my time with the Agency, Ato Hailu replaced Ashenafi who became Vice Minister of Finance. I had met Hailu earlier when he was head of the Awash Valley Authority. Hailu was a different sort. Not flamboyant or with family connections. He rose to this position through diligence, ability to work with people, and an innate intelligence equal to his two predecessors at the Agency. World Bank staff were particularly keen on Hailu, having encountered him when he was an engineer working with a consulting firm in Mexico. I had met him on several occasions regarding some of SRI's proposed irrigation projects and in response to his interest in project planning and analysis. So, when he became our new leader, we had already formed a basis for working together. Soon, Hailu assigned work to me and

relied on my advice in much the same way as did Tekalign and Ashenafi. In that sense, the change in leadership was smooth. Lacking were the "bull" sessions with Asnake, Tsedale, and the other young Turks. Hailu was simply more focused and less fanciful. I enjoyed working with him as well.

One thing that did bother me at times was when Hailu asked me to chair our Saturday morning meetings where the staff reports on our progress and plans for the coming week. I felt that it undermines the morale of Mammo, Waldu, and Sheferrew. Although I recall while attending these sessions "how easily we all communicate," as though we had the same background. Yet, I knew that our histories were vastly different. Pursuing this thought, I recall reading about cultural differences and how these influence one's thoughts and actions. I kept thinking, "There *must* be differences among us. I just don't seem them." It was just that my dealings with the Agency's Director Generals, Belay, and other Ethiopians seemed to go so well. An explanation might be the individualist nature of the Ethiopians from not having been colonized.

Just before ending my work with Hailu I got wind that the Ethiopians were dealing with the Chinese. It amused me that Hailu seemed to go out of his way to keep me from knowing about this. He might have felt embarrassed, given our close working relationship and the on-going conflict between the US and China. Or, he might have been told by his superiors not to let me know. It didn't matter to me one way or the other. The Ethiopians had the right to do what they felt was in their best interests. Still, this was the first time that I had felt left outside the loop in my dealings with the Ethiopians.

Shortly after Hailu took over as head of the Agency, Harvard's Development Advisory Service (DAS) placed several economic advisors with the Planning Commission. These advisors, headed by economist Clive Gray, together with Colin Bruce seconded from the World Bank, materially strengthened the Planning Commission's capabilities in economic development. Before long, I was working, and becoming friendly, with DAS's Don Mead, Jim Goering, and

Bill Dodge. The first two brought with them analytical capabilities in econometrics, a useful tool in formal economic analyses and something that I did not have. Outstanding in DAS's contribution was the occasional visits of renown Harvard economists, including Walt Rostow, Simon Kuznets, Edward Mason, and Raymon Vernon. Each of their visits involved one or more seminars plus time advising the Planning Commission staff. The first three helped lead the way in post WW-II thinking on economic development: Rostow with his "stages of growth," Kuzents (a Nobel laureate in Economics) who revolutionized econometrics and studied the empirical structures of economies, and Mason, who became Dean of Harvard's Kennedy School of Government, and helped write Pakistan's Development Plan. Vernon from Harvard's Business School was a central player in the establishment of the International Monetary Fund, the General Agreement on Tariffs and Trade, and the Marshall Plan. I thrilled at being able to listen to these persons, not to mention the value of their contribution to Ethiopia's Development Plan.

My association with this Harvard organization was more than passive. With AID's and Tech Agency's agreement, I had arranged for a return trip to the States, since Vicky and the children had been in Ethiopia for two and a half years. Earlier, while wrapping up the final SRI report in Menlo Park, I had talked with Dick Morse whom I had known since first joining the Institute. Dick, who sometimes collaborated with Staley, had made his own contribution to economic development through his studies of small-scale industry on the Asian Sub-Continent. Dick had asked me about Ethiopia and my future plans. Then, he suggested that, given my keen interest in economic development, I might want to contact DAS and said that he would write an introductory letter for me. The director at the time was Gustav Papenek whose name impressed me because I had relied on some of his writing in my dissertation. While Vicky and the children were visiting Father Lynn in Hempstead, I flew to Boston for a pre-arranged interview. Instead of Papenek, I met with Lester Gordon, who had appointed Papenek as DAS director. The interview went well and, before I left, Gordon said he thought that, because of my project planning expertise, I would be a valuable asset to the DAS team soon to depart for Addis to assist in implementing the country's Development Plan.

The DAS team had arrived 15 months later. Soon, thereafter, Gordon arrived and I was able to discuss my inclusion as a member of the team once my current contract ran out. To help in the transition, I was to join the team's weekly planning sessions, some of which took place in Gray's home. But it wasn't long after this that my relations with Gray turned sour, even though I had begun to work constructively with other members of the DAS team. I am unsure why this falling out occurred, but I suspect Gray thought my formal education in economics was deficient. I learned this one day when he told me that he knew enough about project analysis without ever having had to calculate a rate of return. Other possibilities were that he did not like Gordon telling him who to include in his team, or that Belay and others had fawned over me. Later, after Gordon had authorized me as a member of the DAS team, Gray called me into his office to say that there was *no way* I would join their team.

By then, I had also established a good working relationship with Bruce. For example, Mead, Bruce, and I traded ideas about implementing the Little-Mirrlees approach to project analysis. Mead invited Vicky and me to a small dinner in his home for Vernon and his wife. Georing helped me out on a coffee study. And Dodge and I collaborated on a shipping study, even suggesting we collaborate in writing a professional paper based on our results. It was just Gray who gave me trouble.

My three years working with the Agency were a jumble of assignments most often originating in the Planning Commission. The three most important studies were those dealing with freeze-dry coffee, a new cement plant, and the Ethiopian Shipping Lines. The coffee proposal came from the joint effort of three firms: an equipment supplier from Switzerland, the provider of the freeze-dry technology from France, and product marketing from the US. The proposal was appealing because it added value to country exports. At the time Ethiopian's "mountain grown" coffee was considered one of the best in the world, or so claimed Folgers, an up-scale brand at the time, that had purchased Ethiopian coffee for years. The scheme was *so big* that it would tie up most of the country's coffee exports, of comprised the most of total exports.

At Belay's request, Ashenafi put together a team that included Bruce, Dalton, Demsic a coffee expert from Yugoslavia, and myself. What we found after the next 15 months was that the proposed venture was not in the country's interest because it required Ethiopia to raise large amounts of capital as well as guaranteeing the coffee supply. We judged the Swiss were using this venture as a way to sell its equipment; we found the French firm had only limited experience in producing freeze-dry coffee; and that the Americans could not be relied upon to market the output. In gaining a better understanding of Ethiopia's coffee industry, I went to the Coffee Board, located on the outskirts of town, where I went through their records of production and exports. I then graphed these historical figures in an attempt to project future production and sales. When I showed these results to the DAS group, I was greeted with what amounted to sympathy. What was needed was an econometrics model, which I couldn't do. So, Goering volunteered to help me out. Aside from the embarrassment of not being able to come up with a suitable model, the time I spent at the Coffee Board was enjoyable, given that the setting was among the eucalyptus groves and the demitasses of rich, dark coffee were the best I had ever tasted.

To gain further insight into the country's coffee assets, as well as to get the family out of Addis over the weekend, I arranged for a trip to Jimma, 350 km southwest of Addis. Leaving Addis, the asphalt road soon turned to a mix of coarse gravel and sharp rocks. The latter proved too much for the thin-walled tires of our Volkswagen. On the way out we had several flats that we got fixed at the service stations along the way. Once at the coffee research station, we checked into a modest motel then contacted the chief research officer, who knew we were coming. He showed us the different varieties under study and their experiments in washing and drying coffee. Nothing striking, but of interest to me.

But on our way back we had more flats, which we were able to get patched. Eventually our two spares were beyond repair, which meant that we were traveling without spares. We held our breadth, but that was not good enough. Eventually we had another flat and could go no further. It was dusk and we were 80 km from Addis. Nothing to do but pull off to the side of

the road and flag down one of the school-type buses that followed this route. As we were locking the car, an elderly Ethiopian with *shama* draped over his shoulder and long walking sit in hand stopped. He greeted us cordially through the youngster at his side who spoke English, suggested that we take as much as we could with us, cover up the rest in the car with a blanket, and have one of the young boys nearby guard our car all night. We thanked him, did as he suggested, and boarded the crowded bus. One of the male riders got up offering Vicky his seat. Our two younger children sat on jump seats pulled down into the isle while Becky, Tim, I stood for the 90 minute ride to Addis. Luckily, our house was close to the main highway. So, we didn't have far to walk once we got off the bus.

The next morning I found two spare tires, borrowed another vehicle, and Vicky and I went to retrieve our car, not knowing what to expect. Holding our breadth, as we approached the spot where we had left our car, we were delighted to find it exactly as we had left it, a small boy with his own stick sitting next to it. After giving him a modest tip I changed the flat tire and headed home. How nice it was to encounter such good will when being so vulnerable, especially given the prevailing thefts in Addis. Thus the saying that one finds honesty in the countryside proved correct.

Back to the freeze-dry proposal. Two factors convinced our study group that the proposal being offered the Government was not a good one. First was a market study carried out by Vince Lowenberg, an SRI employee who joined the Tech Agency in 1970. Before he left the States we asked him to contact the major freeze-dry suppliers in the USA and then to stop in Europe on his way here. He found that a Coca Cola subsidiary in the USA and Nescafe in Europe controlled 80 percent of the world market for freeze-dry coffee. Thus, the Ethiopian venture would have to compete with all the other suppliers in the world for the remaining 20 percent. The clincher, however, came when the American partner in the proposal said that it would guarantee annual sales amounting to 30 million dollars. When we ran a Dunn & Bradstreet on the firm we found that the guarantee was meaningless. The company's total assets were \$250,000 most of which were in inventories and accounts receivable. Its fixed assets were

furniture and one automobile whose combined value was \$5,000! So, its multi-million dollar guarantee was a fraud!. This was one of the more egregious examples of the many hucksters who prey on countries like Ethiopia hoping to tap the large amount of funds coming from donors thinking that the country is either gullible enough or unable to evaluate the intricacies of what their proposals. Ironically, I found the Ethiopians more astute in this regard than some of my own countrymen. At times when asked if I had accomplished anything during my five years in Ethiopia I could refer to having helped block this unsavory proposal.

A second study of significance involved the location of a second cement plant in Ethiopia. Studies by the investor had justified the need for another plant. The questions now concerned its size and location. The analysis could have been straightforward involving the location of suitable limestone and gypsum deposits, predicting the size and location of the demand for cement, and production and transportation costs. The most obvious location based on the foregoing factors suggested the greater Addis area. One plant was already located here; another would add to its capacity. However, complicating the decision, was Yilma Deressa, who wanted the plant cited on his property near Dire Dawa. As in many developing countries, the Ministry of Finance is often one of the most powerful in the Government. Yilma was no exception. In our analysis we found that the Dire Dawa area was suitable in terms of available limestone and gypsum, and its proximity to the Addis - Djibouti railroad. However, the deposits were not superior to those in Addis and the potential demand in the Addis area was expected to exceed that in the Dire Dawa area several times over. While the railroad facilitated shipments to Addis, this factor did not compensate for the extra cost of doing so. The Minister, through his representatives, countered by saying cement could also be delivered to Djibouti for export to countries bordering the Red Sea, where considerable construction was going on. After checking into this possibility we found that most of the suggested countries had their own sources of cement. Cement being a low value to weight commodity means that it is unprofitable to ship it great distances, unless local supply is not available. But limestone and gypsum are commonly found throughout the world and the technology for its production is well known. So, we were not surprised to find little outside demand for cement produced in Ethiopia.

After Hailu had conveyed our team's findings to the Planning Commission, but before we had finalized our report, I received a visitor in my office one Saturday morning. He was Yilma's nephew. We talked in general terms for awhile then he ventured, "Is there nothing we can do for you that will change your mind concerning the location of the cement plant?" This came as a surprise, since I was not accustomed to being pressured in this way. I simply said "No." whereupon he got up, smiled while shaking my hand, and left. Soon, thereafter, Hailu informed us that Yilma had called him into his office and stated flat-out that he wanted the Agency to recommend the Dire Dawa location. Hailu said he couldn't do that. And Yilma retorted, "I'll have your job then!" But that didn't occur; and eventually Hailu rose to a position in Ethiopia's Council of Ministers that outranked Yilma.

I have occasionally been asked about bribery and corruption in the countries I've worked. To my knowledge, and I admit to a certain naivete, this was the only time I've been offered a bribe. Hailu's stand against a much higher ranking official was an outstanding example of the integrity of most of those with whom I had worked.

The third study concerning the Ethiopian Shipping Lines was straightforward being devoid of shady investors or political pressure. ESL was set up as a government corporation that would operate as a private company without relying on Government funds. Operating funds were to come from profits just as any private company is expected to do. But the company had suffered losses for the past two years. As a result the General Manager, Ato Negash, was under considerable pressure to correct the situation.

One day, Hailu called me into his office where he introduced me to Negash whom I found intelligent, modest, knowledgeable about shipping, and willing to cooperate in any way he could to improve the Lines' performance. By the time we finished our meeting, we had agreed that Hailu would arrange for a small study group to look into the problem. I was to lead this group as Belay had suggested. Belay had also chosen two of his senior staff to be members of the

study team one of whom was Themi Marinos, a Greek national with naval experience working for the Commission, and the other was Bill Dodge who was part of DAS. Negash would be a member and Bruce would be made available as needed. After a couple of meetings, our group realized

that we needed more expertise on the day-to-day operations of international shipping, so we obtained the help of a Norwegian consultant.

With this staff in place, we set about gathering the requisite information. After spending hours studying the Lines' schedules, operating methods, and profit-and-loss statements we found the nub of the problem. ESL has been carrying oilseed cake, which is the residue once oil used for cooking has been extracted from the seed. The cake had a ready market in Europe as a cattle feed supplement. Thus, the export of oil seed cake earned foreign exchange, enhanced the profitability of the oilseed industry, and helped farmers who grew the seed. The drawback to these shipments was the fire danger because this cake is highly inflammable when shipped in a enclosed environment. As long as ESL had not filed a claim, the London-based insurer had kept its premiums at a level ESL could afford. But a few years back, a fire broke, but caused only minor damage. When a second fire occurred, which caused only minor damage, insurance rates went up several fold and profits plummeted . . . which was the reason our group was asked to see what it could do on ESL's behalf.

Once the high cost of insurance came to our attention, we knew we had identified the problem. Now, what to do? Our recommendation was straightforward. *Cancel the insurance policy!* Our reasoning went like this. One takes out insurance for losses a company cannot cover. For those with strong financial resources, insurance is unnecessary because whatever the losses the company has the resources to cover the losses. Since insurance companies have both operating costs and the need for a profit their charges must be substantially larger than the *expected value*² of the losses they are protecting against. Since the ESL is a *government*

² Expected value is simply the summation of the probability of each occurrence times the value of that occurrence.

corporation, Ethiopia's total resources are potentially available to cover whatever losses ESL might sustain. Budgets might have to be adjusted to fix the damage; or, if a total loss, another ship could be purchased or built. But the Government has the *financial capacity* to do this, as well as reimbursing the private owners of the oil cake. By cutting out insurance ESL is *self-insuring* with the Government itself bearing the risk—which it is capable of doing since from the national perspective the risk is small. I don't know if the Government bought this argument because we left Ethiopia before a decision was made.

Aside from the above, Israeli's interest in Ethiopia as a tourism destination held the Government's attention for awhile. The Israelis thought Ethiopia offered convenient "sun and sand" locations similar to those in Kenya, as well as Ethiopia's unique history that included the sunken churches at Lalibela, the obelisks at Axum, the site where the Queen of Sheba held court, the castles at Gondar, and the source of the Blue Nile at Lake Tana. Consequently, a group of Israelis came to Ethiopia to look into the opportunities more directly. Someone in the group expressed an interest in meeting some of the Falashas who lived north of Addis. These are black Ethiopians who practice Judaism. Our local guide directed us to a small village located on a mountain side. After the initial greetings, one of the village leaders led us into a dark, smoke-filled, circular hut no more than ten feet across and six feet high at the center. There on the packed dirt floor was a black elderly man sitting on a Jimma stool. After the appropriate exchange of pleasantries, the Israeli leader asked the elder about his knowledge of Hebrew. The elder then reached to a shelf and extracted a worn, leather-bound book that turned out to be a Hebrew bible. Upon looking at it, the Israeli asked the elder to read from it, which he did with pride. Later, one of the Israelis said that the Falasha's Hebrew was excellent. The Israelis left marveling at having encountered what they considered of Israel lost tribes. Later, we learned that Israel's open door policy allowed some of the Falasha to migrate to Israel. Though touching, the adjustments required of these immigrants was not easy, considering the isolated nature of their life in Ethiopia. Though I was encouraged by the possibilities, nothing ever resulted from the visit, as far as I know.

Another possibility that held interest for awhile were the irrigation opportunities that SRI had identified in the Dire Dawa region. The interest arose from the belief that the large rainfall coming down the north side of the escarpment might provide a large source of underground water in the surrounding barren area. To explore this possibility the Agency contacted Tahal, an Israeli water resources firm, to drill exploratory holes. The results came up negative because the surface water draining into the Awash Valley followed large rock crevices that fed into the deep aquifers below.

Then there was the meat plant proposal that was a follow-up to the attempt of Harris and Kutick to capture the cattle market in the Shashamane region. It had no more merit than their other proposal. Another questionable scheme that took up some of our time were the tannery and tire proposals, which were presented to us as profitable ventures, except that his was no more than a scheme to sell the manufacturers' equipment. Just so many of these that needed to be rejected once we had looked into them. Besides these there were those related to asbestos-cement as a building material, alfalfa pelletization, beer and malt production, production of gum arabic, support for the national handicraft school, shipping sheep across the Red Sea, ship repair facilities, and the market for wool and hair. All but one of these came at Belay's request.

Besides the above, which are not worth describing, is an idea brought to our attention by Ibrahim. He thought that the natural gas being flared at Ethiopia's sole refinery ought to be captured, bottled, and sold on the local market. Since it was his idea we turned the study over to him. After considerable effort we concluded that the opportunity was minimal. Waste happens and in this case the economic threshold to make conservation viable was far above that being flared. Rather than nipping the idea in the bud I opted to let the study unfold as a lesson. Not all waste is worth avoiding.

Of a more substantial nature was the possibility of an irrigation projects in the Dire Dawa region that had been identified by SRI. The belief was that heavy rainfall draining down the escarpment would provide a large, renewable source of underground water. To explore this

possibility the Agency contracted Tahal, an Israeli water resources firm, to drill exploratory holes. However, results came up negative because the surface water draining into the Awash Valley followed large rock crevices that fed into deep aquifers that could not be tapped.

Other SRI projects that we set aside after only a brief analysis, were regional development in the Awash Valley based on the RAM approach, fertilizer and castor seed production, oilseed extraction, and the marketing of hides and skins. An East European country proposed tannery and tire production in Ethiopia, which became suspect once we learned that the estimated high profitability accrued to the equipment suppliers. A proposed Japanese venture appeared legitimate since this would be an expansion of their on-going activities in Ethiopia. And so on.

In the middle of May Bredo and Miller came to Addis to present the final copy of our agro-industry sector study. They got a cordial reception from Belay, but Ashenafi and his two Yugoslav advisors gave them fits, charging nonfulfillment of contract! Fischer who was sitting in for AID said he had never been so insulted. Even so over the next year, Bredo and others at SRI came to Addis in the hopes of getting additional contracts here. I thought that one of the reasons Bredo had agreed to my leave of absence was hoping that "having a man on the ground" would help SRI land further contracts here. For whatever reason, SRI was singularly unsuccessful.

So much for work. As noted, our family was having a pleasant and full social life here centered around, though not restricted to, golf. It was not just the game but the international community we met as a result. Members included the prince who was president of Haile Selassie University, an elderly gentleman who was related to the Emperor directly, the Ambassadors and Embassy members from Japan, India, Scotland, Spain, Mexico, and South Korea, the two Indian colonels, several TWA pilots and their wives, MAAG soldiers, and a few Ethiopians of modest means. Our golf tournaments in Asmara where our team went every other

year meant that we competed with both members of the US military and Eritreans caddies who worked at Kagnew Station.

During one of our golfing trips to Asmara the commandant of the base, Brigadier General Rip Collins invited the men and women of both competing teams to his home for cocktails. He was a broad-shouldered hulk of a man who got in your face while talking, even on mundane matters, spit sometimes spewing from his mouth and jabbing his index finger in the chests of men or the shoulders of women. Vicky went through this experience and said her shoulder was sore by the time we left his residence. The story leaked out that when one of them left the post at the end of his assignment, the General insisted on drinking an *after burner* with him. This was a flaming full shot of brandy. The trick was to throw the shot quickly down the throat, flame and all. When done this way, the flame is quickly doused and the drinker feels little or no ill effect. We heard of one timid soul who couldn't bring himself to such an aggressive act and ended up singing his lips and burning much of his mustache. The general was not the most pleasant guy in the world. But those under his command liked him. We also heard that he gained his general's rank through outstanding service in North Korea and Viet Nam.

On one of our flights to Asmara Vicky commented to one of the EAL stewardesses that we ought to be celebrating because it was the Emperor's birthday. This worked. Shortly, the head steward ordered "champaign for everyone." So we all drank a toast to his health and long life. Later that evening as our golf team was having a drink in the nondescript bar of our small hotel, we noticed a familiar figure ascending the stairs. It was Van Heflin, a popular character actor of film and stage. He had even had a recent role in one of Rod Serling's Twilight Zone programs. We didn't approach him, but learned later that he was visiting his daughter, who was with the Peace Corps working in Eritrea.

A public showing of empathy between the royalty and the populace was not uncommon. One time when returning from Sodere we saw the Emperor's limousines stopped by the side of the road surrounded by a group of small children in ragged clothes. The limousine was being

escorted by a dozen motorcycle cops. While remaining inside, the Emperor appeared to be receiving some sort of petition. While this was going on, his aides were handing out sweaters and blankets: important items because of the cold, damp days during the extended rainy season. This image of the Emperor fitted closely with the impression that he was a benevolent ruler, not just a fierce strongman. Also, it was said that he remained in power because of his ability to recognize and mediate the divergent interests of the country's many ethnic groups. In this respect he and Broz Tito had much in common, which could explain their long, cordial association. Another factor helping to explain Haile Selassie's longevity as a ruler was his claim to be a direct descendent from the Queen of Sheba and King Solomon. Being known as the Lion of Judah was part of that aura.

Another party of note was the one thrown by Lorraine, Ernst's single, black executive secretary. I had gotten to know Lorraine while negotiating the contract for my stay with the Tech Agency. She was tall, perhaps 5'-10, lithe suggesting athleticism, and bright-eyed with a ready smile. Living alone, she once told me that she likes to slip on something comfortable, turn up the volume on her record player and dance around her spacious living room. I told her that Vicky and I too liked to dance. We hit it off, but in a casual way. So, I was not surprised when she invited Vicky and me to a cocktail party she would be throwing soon. By the time we got to her apartment, the party was well under way as evidence by the music we heard as we reached her apartment. She greeted us at the door. Then, as we stepped into the dimly-lit entryway we could see perhaps fifty people scattered about, about half of whom were dancing. But, to our surprise the crowd was entirely black-American Negroes, except for Red Youngstad an editor from John Fischer's staff. One of the songs being played was get your mojo going. I had never heard the term before, and am still unsure of its meaning. But from the way the couples danced, it sounded interesting. Vicky and I had just entered the realm of American Negro culture, hardly possible back home. As Vicky watched the dancing before joining in I noted a fellow I recognized as a member of the Anglican church we attended. He was a Nigerian who worked for ECA. I don't recall what I said, probably something about Ethiopia's economic future. I think he had had too much to drink because before I knew it, he was accusing me, along with

most whites, of thinking all Africans descended directly from monkeys. He went on to say those who thought so were ignorant, since he for one had a doctorate from the UK. So, chagrined I slipped away and found someone who was not so tightly wound. He was Mal Whitfield, 1948 Olympian gold medal winner in the 600 meters and 4x400 meter relay, and the 600 meter again in 1952. He was in Ethiopia on behalf of AID conducting a training camp for the country's runners. He warmed to us, eventually telling us about his family, and that his father had been a railroad conductor. So, this evening, which began badly, ended on a high note.

My folks arrived on a lovely October morning in 1970 after spending some time in Europe on the way here. Dad had been especially anxious to visit some of the sights along the Rhine, particularly Koblenz where he had been quartered during WW-I. Dad got much out of their stopover in Greece, but unfortunately Mom didn't because she couldn't keep up with him. By this time Mom, at 74, had begun to show her age—the effects of a failing heart and a series of mini-strokes. During their three and one-half month stay, Dad reveled in his meetings with our ambassador, William Hall, whom he met on the last leg of their flight to Addis. Dad, being the gregarious guy he was, had talked with the Ambassador at length. This led to an invitation for lunch at the Embassy. Dad played golf, drove around town in my *cecento*, and explored the city, sometimes with Mom, but more often not. The two of them went to Lalibella to see the sunken churches. At the tourist lodge where they overnighted they heard about a fly, whose sting is accompanied by eggs being planted beneath the skin. In time, the eggs hatch and larva emerges from the sore.

More common were the pesky Egyptian flies, which were so prevalent in Ethiopia. These are so small and light that one can scarcely feel them, even when crawling on one's face. Moisture-seeking, they will sit at the corners of young children's eyes, drippy noses, and corners of the mouth without the child bothering to brush them away. They affected us adults just as well, however we would brush away and cover our mouth whenever we yawned, or otherwise draw in our breath, for fear of inhaling one. In fact, Dad claimed that inhaling a fly gave him diarrhea. More likely this was simply from being in Ethiopia. On one occasion the cause of his

illness was more direct. Vicky and I, with the kids encouragement, had wanted to show Sodere to Mom and Dad. On the way there we stopped at an Italian restaurant that we knew. Both Mom and Dad had been careful in what they ate, staying away from uncooked vegetables. But on this occasion, Dad, seeing me order a plate of raw tomatoes decided that he should do so too. A mistake! By that time, my immune system could handle such things, but Dad's couldn't. And he suffered for it, saying "First I was afraid I would die, then I was afraid I wouldn't." Thus, making light of his discomfort. Luckily, the folks were not with us one evening when we as a family ate at one of the modest, poorly lit restaurants just down the hill from the *Piatsa*. I had ordered a side order of kidney beans. After several bites, I looked more closely at those that remained. To my chagrin, I saw that most of them had worm holes. I didn't notice any worms, but the sight ruined the rest of the meal. Just another "thrill" of living in a third-world country. But not all eating experiences were bad. One of our favorite restaurants, was the Villa Verde, a modest Italian restaurant next to the railroad tracks on the edge of town. The male waiters reminded me of the professionals we had seen in San Francisco's financial district or the Edelweiss in Madrid. And the gambas planchadas grilled in garlic butter were a thing to remember! Besides the food our kids liked going there because of the children's swings next to the parking lot.

Somehow, I decided I would run for the Board of the American Community School. The school was established to make it easier for Addis's large American community to school their children. Without it, we from the States might send our children to a religious-based school, such as Good Shepard, run by the Swedes; or, if one had the interest and ability, the French or even German school. But these possibilities were seldom selected. If not that, then Europe, where several private schools of good quality are available. In addition to the practical side, the policy of our government, here as well as elsewhere in the developing world where a large, expatriate community lives, is to offer an American education to the locals as well as others. While we were there I think about 40 percent of the student body, K through 12, were Americans. Ethiopian children made up the next largest group followed by children from those working with the ECA for a total of 400. For example, Becky's junior class size was 31. The

school was run by a principal, who was an American, and staffed by 35 teachers the majority of whom were relatively young and from the States. About thirty percent of the teachers were Ethiopian. Overall administrative responsibility rested with the US Military in Athens.

I succeeded in being elected to the School Board early during my second tour, a position I held until our departure from Ethiopia. Once the new Board members were announced, Jack Lutz, the superintendent with a PhD in Education, offer us his congratulations. He was dark-haired, slender, and delicate with a ready handshake accompanied by a solicitous smile. Dave Gephart whom I knew from AID was also elected for the first time. We soon learned that we had stepped into a hornets nest. So, the two of us decided to see what we could find by interviewing most of the teachers and a cross-section of parents. We found that Lutz was greatly distrusted by those opposed to him. They found him dishonest, deviousness, and consequently ineffective. In contrast, others found Lutz to be a good educator who was understood the teachers' needs and, consequently, doubted the word of those who opposed to him. At our first meeting of the full Board, Dave and I presented our findings. The Board decided to take no immediate action, but to remain watchful.

Weeks later, Colin Bruce's wife Gina, who was Lutz's executive secretary, called me at home in a highly agitated state. She said that Dr. Lutz had asked her to type a letter to the School Board from the Defense Office in Athens. This office had administrative and oversight responsibility for US-supported schools in the region such as ACS. Lutz had made it a practice to receive communications from the Defense Office before passing them on to the Board. One might question such practice, but the high turnover of Board members probably made such practice seem reasonable. What upset Gina was that the letter Lutz had asked Gina to type included a modification to the original letter, which had been critical of the school and had suggested certain changes. The letter that she had been asked to type included the DO letterhead and second page including the author's signature. But Lutz had eliminated the critical portions. I thanked Gina for the information, said I would not reveal the source, and would take it from there. I then called Logel, the Ambassador's representative on the Board, telling him what I had

Just heard. He suggested that we bring in the Board Chairman to figure out how to proceed. The three of us sweated over what to do till 3:00 a.m. Finally, Logel said he had enough information to go to Ambassador Hall. Within the week the Ambassador instructed us to get rid of Lutz, leaving the details up to the three of us. To provide some sort of legal protection against possible countercharges against the Board, we persuaded Gina to write and sign an accusative statement against Lutz. Being a British citizen, we told Gina, much to her relief, that her statement would be held in confidence by the British Ambassador and used only if needed. With that, Gina resigned.

Nancy Zaki, an Egyptian national, took over as Lutz's secretary. And before long she too found irregularities that included Lutz coming to the office on weekends to open teachers' personal mail and to alter the minutes of Board meetings. As part of building our case against Lutz, Logel, Gephart, and I asked for a statement from Nancy. Nancy, like Gina, feared Lutz's reaction should he find out about her revelations to us. Consequently, Vicky and I agreed to put up Nancy in our house until Lutz finally left the country. With our ducks in order we met with Lutz to tell him we knew about the forged letters and his other misdeeds. He feigned surprise about the forgeries. Finally, Logel gently took Lutz by the arm and suggested the two of them go for a walk. After a quarter of an hour, Logel returned to saying that Lutz had agreed to resign. As cover, we agreed to tell the rest of the Board, and subsequently during a regular meeting with the parents, that Lutz had a family problem that required his immediate return to the States. When the Board announced Lutz's forthcoming departure at the regular meeting, the news was taken with little commotion. We offered Lutz this out, so as to keep the rancor down, for a sizable number still liked the guy despite the charges floating about. While our decision smoothed over a difficult situation and left Lutz's standing in tact, I'm not sure it was the right choice. In handling the situation in this way, we probably contributed to another's problem, for within a couple of years we heard that he had obtained a similar position in one of West African countries.

Later, Ken Eubanks of AID who was a newly elected Board member, got wind that some of the students were smoking pot. Together with Logel, who was still the Ambassador's representative, the three of us searched student lockers late one night. (Since then, I have been told that we probably violated some form of civil rights. But with the Ambassador's blessing, the thought never occurred to us. Besides, the Ambassador has considerable power over US citizens with in the host country much as does a ship's captain.) We did find a suspicious substance in one of the lockers. Although Logel and I pleaded innocense, Ken said he knew an expert who could advise us. He turned out to be Ken's 17 year old son! We drove to Ken's home and showed the sample to the son, who studied it carefully, let a knowing grin cross his lips, then began to expound. In doing so, he changed his way of speaking to that of street-talk. We figured he was simply showing off. His dad seemed proud! The stuff turned out to be marijuana, but of low grade he assured us. When we passed our findings on to the Ambassador, we were told to keep this quiet. The culprit was the son of the Embassy's undercover CIA agents! So, without even trying, we had unearthed one of these. A common cocktail topic is, "Who's the in-country CIA agent?" even though our Embassy warns us that such speculative talk is not in our country's interest.

I stayed on as the Board's Secretary for the last two school years we were in Addis, becoming the ranking member in terms of seniority simply because of the high turnover of families with children attending the school.

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Besides the full life we lived as a family, the children's involvement at school and mine with the School Board, my stimulating work in the field of my choice in association with first-rate professionals, golf, and occasional weekend trips to Sodere and the lakes region, we also benefitted from ample leave time. The first of these came in July of 1969 as home leave, which, technically, was a carryover from the SRI contract. It had been just short of two and a half years since Vicky and the children had been back to the States. We took advantage of the trip home to stop in Cairo, our first time in Egypt, to see some of the sights. We checked into the lovely Nile Hilton, located right on the east bank of the Nile in the center of town and next

door to the famous museum of antiquities. We spent nearly a half day in the museum, including viewing King Tut's mummy. The windows had long, crisscrossed strips of tape across them as protection against being shattered should the Israelis bomb the area. We also visited the pyramids and sphinx at Giza, where we rode the camels. The experience made us feel like true tourists, for as soon as we were around the corner from where we mounted them, the camel drivers, who walked along side, began hitting us up for money saying we're poor and the owner doesn't pay us a decent wage. Later, as we were walking along the pleasant tree-line walk bordering the Nile, hawkers wanting to sell us trinkets continued to pester us. When I tried as politely as I could to say I wasn't interested, one of them persisted by thrusting what he had to sell in my hand where upon I threatened to throw it in the river. Affronted, he said, "Why are you so angry? I'm just trying to do is make a living." Good point, but not by being a pest.

Wanting to view the city's famous Khan el-Khalili market we asked the concierge to find us a guide. After viewing this great expanse of small stalls and exotic smells that reminded us of the Arabian Nights, our guide suggested we might like to see how perfume was made. A mistake. Hiring a cab, we drove to another part of town where we entered a large shop. The gleam in the shopkeeper's eyes made us suspicious, and rightfully so. After a flowery greeting, he suggested we take a seat then offered Vicky and me sweet, dark tea and soft drinks for the children. He proceeded to show us various samples of perfume concentrates, as well as sprays and toilet water. This visit had nothing to do with the perfume manufacture, but an unabashed sales pitch. Disgusted with our guide, we walked out without showing our appreciation for the drinks or by buying anything. At that point we told him to "get lost" and took a cab back to our hotel. While we had enjoyed the sights and our hotel accommodations, our brief stay of a few days seemed like a hustle from start to finish.

From there we flew to Lisbon. We checked into a modest hotel for a few days, rented a car, and decided to see the sights *sans* guide. Striking remembrances are the beautifully clean-aired city, with the steep streets leading down to the wharf that reminded us of San

Francisco, the black and while mosaic sidewalks outside the national museum, and the sturdy backs of the women we saw in the villages along the central coastline.

We took advantage of our return trip to stop off in London. The overnight flight from JFK landed us in London around 6:30. We checked into a bed and breakfast where our friendly female kept calling me Duckie. Wanting to take advantage of our short time in London, we arranged for a bus tour the afternoon of our arrival. Another mistake! No sooner than we boarded the red, double-decker than we all dozed off, with the result that we could scarcely recall anything we had seen. We took the children to see Madame Tussaud's wax museum and Vicky and I saw a stage play. From there, we flew to Rotterdam, where I visited the Netherlands Economic Institute–home base for my advisor, Boon, Tinbergen, Bos, and Koyck³ were also members of the Institute. I had relied on the writings of all three in my dissertation. So, I was anxious to see the place. From Holland it was a short train ride to Koblenz. Once there, we took an afternoon cruise on the Rhine, where we were served typical German fair (among my favorite) and the local white wine. A train took us to Frankfurt then we flew to Athens where we caught a flight to Ethiopia. To our surprise, the EAL captain was Salvers. Shortly after we reached cruising altitude, Sal came back to me and asked if I wanted to sit on the jump seat in the cockpit. Which I thought was great. As dawn was breaking and we were approaching the Asmara airport from perhaps 10,000 feet I could see what looked like a small pencil far below. This was the runway. And I wondered how it were possible for our two pilots to line the plane up to such a small target. But as they throttled back our speed for the descent, the runway became larger and the task of landing became less onerous. That soon changed. We had touched down smoothly, but as we passed the terminal midway down the landing strip the plane had not materially slowed up. I looked over to his Ethiopian co-pilot⁴ who was struggling to

³ Authors of The Appraisal of Investments in Transportation Projects: A Practical Example, Netherlands Economic Institute, 1958.

⁴ When we first arrived in Ethiopia, all of the 707 pilots were senior TWA pilots with the Ethiopians serving as co-pilots in an understudy arrangement. By the time we left Ethiopia, most of the senior pilots had taken over as senior pilots. Long before that, however, Ethiopians piloted nearly all of the short-hop, domestic flights that relied on WW-II vintage DC-3s and

reverse the engines—needed to break the plane's speed. Finally, Salyers let out an oath, grabbed the throttles levers with both hands, and got the engines into reverse. Our plane rolled to a stop, close to the gully at the end of the runway. Having flown out of Asmara many times, I knew we would be in trouble had we not stopped in time. As we were returning to the terminal I caught Salyers' eye and said, "That was exciting." And he replied, "Yes, it scares me every time I land!"

Before long, Salyers was to take the wealth he must have acquired these many years of flying in Africa and retire to his home in Texas. The frequent highjackings occurring around the world provided the backdrop. But what brought this danger home to him, was the bombing of the Emperor's plane while it was still on the tarmac. No one was injured in this event. On another occasion, two hijackers attempted to take over an EAL plane while in flight and the guards, in plain clothes, overpowered them and slit their throats *right in front of the passengers!* That was enough for Sal. He retired shortly thereafter. I think it was enough for potential hijackers because I think that was the last attempt on an EAL flight.

One of the great advantages of living in a place like Ethiopia were the opportunities it offers to visit strange, far-away places. So, a year after returning to Addis, we took my first RNR under my new contract to go to the Seychelles Islands–11,000 miles duet west of Mombasa. Our family took the one and one-half hour morning EAL flight to Nairobi that left us enough time to go to the train station where we boarded the train for an overnight trip to Mombasa. First-class for the six of came to only \$50. Once there, we bought our tickets on the British & India freighter, Kampala, which sailed late afternoon. As we were passing through customs at the dock the official handling us asked if we had any Kenyan shillings. We said yes, about the equivalent of a thousand dollars. He said, "Don't you know it's illegal to take Kenyan shillings out of the country?" "No,' we responded. "Yes it is. Give them to me." (In Addis we had purchased the shillings we thought we needed during our time in the country because we

had heard that the rate of exchange was better than the one we would get in Nairobi.) Vicky stiffened her back and said, "No way will we give them to you. I'll throw them outside to the people in the street before I give them to you." Somewhat taken aback, we tried to explain that we were returning in three weeks and would be spending the rest of them here. Eventually, we said we wanted to see his supervisor, which he agreed to. The supervisor listened courteously to our story, including the fact that we were a family of six, had our return passage booked, and even hotel reservations in Nairobi. He smiled, telling us we could keep the money, and to have a nice trip.

Our voyage put us into Mahé two and a half days later. The crew was small and friendly. On the second night out, the captain invited us and the rest of the small group of passengers to attend the "horse races." When we arrived for the evenings' entertainment, we saw an oblong track divided into eight lanes with plastic "horses" set on small, wooden platforms. To each platform was attached a line that in turn was attached to a spool each of the competing sailors held in his hand. The rules of the game were that each sailor had to chug-a-lug a glass of beer, then begin turning the handle of the spool as fast as he could until the sound of a whistle meant for him to stop. This routine repeated itself until the winning horse crossed the finish line. We were to bet on the horse we thought would win each of the races. With little guidance to go on, Vicky said, "See which sailor the captain bets on. We'll bet on him." And so we did. And so we won!

It was a beautiful sight sailing into Mahé at noon: the clear, turquoise water, the sandy beaches ringed with palm trees, and the verdant mountains in the distance. There was no dock so that the ship weighed anchor hundreds of yards off shore. We watched as the crew loaded our baggage into large nets and the crane swung this cargo over the side above the launches below. While watching, we saw one of the suitcases slip out of the netting and fall into the water. On closer look, we saw that the suitcase was one of ours! Once we got on-shore we opened it up and found that its contents were wet, but not materially damaged.

A taxi took us to the resort where our travel agent in Addis had arranged for us to stay. Because the rates on Mahé were modest, we chose what we thought to be the classiest of the four resorts on the island. At this time, besides not having a landing dock, the island had no international airport, which accounted for the relatively low rates. Vicky, who had made the arrangements, presented our papers along with a copy of the cable we had sent from Addis confirming our arrival date. (Over the years, I had relied on Vicky to handle such arrangements, partly because she was good at it and partly to allow me to keep focused on my work.) To our shock, the clerk said that we had no reservations! "But what of our telegram?" we asked. The answer was, "The management does not reply when we are fully booked," implying "Why spend money on guests who will not be staying with us." Our feelings were divided between frustration and dismay. What were we to do during our 17 days on the island? Before we arrived, we knew that our only way back to Kenya would be the Kampala on its return trip to Mombasa. We had no other recourse. We were stuck. After some prodding, the clerk called two other resorts only to find that they too were filled. At last, he said the only remaining possibility was the Sunset, a primitive, mom and pop place run by a native couple named La Blache. We accepted with relief, but we held our breadth about what the place would be like.

We hired another taxi, lifted our baggage onto the overhead rack, and loaded all four of us into a rather shabby vehicle of questionable vintage. The trip to the "resort" took about half an hour. We held our breadths as our driver turned off the macadam road and down a steep slope to the lodge. As the beach area opened up before us, we gasped in delight. The office-dining room was set on a piece of land that jutted into the ocean on both sides were the most gorgeous beaches we had ever seen. On side was a small, protected lagoon with pearly white sand; on the other was a rocky area with deep blue water that abounded (as we were soon to find out) with all sorts of marine life, including a large turtle. Some of the beach houses set back from the beach were nicely done while the one assigned to us was rustic. It was built of unfinished concrete block, a raftered roof without a ceiling, and un-screened windows. Looking out the back door, we were confronted by an expansive cobweb with a huge black spider with

yellow at its center. We were further surprised to find that the daily rate for our whole family was only \$23 per day for room, board, and laundry.

We whiled away those lazy days. We swam in the lagoon, put on our snorkeling gear to swim a couple of hundred yards around the rocks, lay on the beach, learned to watch out for the stone fish that bury in the sand and can send up a near-deadly poisonous barb were one to step on one, as well as the cone shells, sea urchins, or the blue bottle jelly fish—all of which we escaped, except for Paul. Attracted by its bright color he received a painful rash when he innocently touched one. As for danger from the others, we scarcely worried, but were careful just the same. After Paul's mishap he was careful too. The rock-studded area on the other side provided a quick entry to deep waters. Lazily snorkeling on the surface gave me the impression of flying, for the water was so clear and still. It was here that I saw a turtle swimming 20 feet below me. Later, Vicky said that a school of six-inch white fish were nearly touching my fin-clad feet. The tiny, blue effervescent fish were every where.

The husband and wife owners were accommodating and unassuming, perhaps in their early fifties. The guests numbered around twenty. A couple of the men appeared to be retired British officers, in their sixties. What made us think that? It was their military bearing. Each morning one of them would approach the accustomed place at *his* table, inspect the place setting, rearrange the silverware, pull back the chair, straddle it, then sit down. On cue, the other would come up behind him, pat him on the shoulder, and say, "Good morning, governor." Paul, especially, was a mimic, and it was all we could do to keep him from blurting out this greeting to Becky, Tim, or Mike. Towards the end of our stay, we learned that the owners were throwing a party for us. They had hired a seven piece band. The band comprising an accordion, a banjo, guitars, and fiddles, arranged themselves facing inward. Their music was strange to our ears as was the seriousness of their expressions as each seemed to play independently of the others. Years latter, when Vicky and I vacationed in New Orleans, we concluded that the music they played must have been a form of Zydeco.

Thus, the days passed. We became so lazy, that at times it was difficult to make breakfast by the 9:30 deadline. Then after eating we would come back to our room, read for a while, then doze off. When we could muster the energy, we hired an ancient, open-aired car for five dollars a day so as to tour the island. We took the winding road into town, walked the streets, and visited the local museum. As we were leaving, an elderly mulatto sitting on the steps saw that I was eying one of the large clams with its ruffled edges that spread nearly two feet across when fully open. He asked me if I had heard how an octopus could eat the clam without losing most of its tentacles. "No," I responded. Whereupon he proceeded to tell me how it was done. Spying an

open clam, the octopus tosses in a small stone and the clam closes up. The octopus waits until the clam opens up again, then tosses in another stone. Same result. Eventually, the clam is so full of stones that the clam not longer can close its shell. And the octopus simply reaches in and grabs the clam. The whole story with embellishments must have taken fifteen minutes. Meanwhile, the family was waiting in the car wondering what had delayed me. I suspect the local was smiling to himself thinking, "Well, I found another gullible tourist."

We interrupted this tranquility by taking a launch to Praslin, a small, less populated island two hours away. The island boasted about having the world's only black parrot and the *coco de mer*. Not mention was made of the sand fleas that occupied the wide, sandy gently sloping beaches. We took walks down narrow paths lined with gigantic ferns that towered over our heads. Palm trees and other tropical growth darkened our path. We never saw the black parrots, but we saw plenty of the *coco de mer*. These were tall palms with a double coconut, whose smooth and shiny, dark green husk resembled a woman's behind. Perhaps it was because of this that General Gordon, who reportedly visited the island, dubbed it the Garden of Eden. The Muslims to the north must have bought into the legend because we heard that they thought that the meat of the coconut served as an aphrodisiac.

One afternoon after we had ascended a hill that overlooked a small valley. We climbed the rickety steps to a broad platform with a mounted telescope. Looking through it we could see a sleek cruise ship on the horizon, which turned out to be the Lindblat Explorer. Soon, we saw a line of tourists winding their way along the path we had taken to get to the observation tower. We stood aside as the tour guides lugged up cases of cold drinks then set them down beside the telescope. Then, each of the forty or so tourists climbed the steps one at a time, was handed a coke, peered through the telescope at the surrounding area for half a minute, finished the drink, and went down the steps—having seen, it would seem all there was to see. Listening to their chatter revealed them to be Germans. After they left and were continuing down the path, we noticed one of the men, a stout fellow with a huge stomach stressing his *Lederhosen* take out his camera with a two-foot long telescope lens. He leaned next to the trunk of a tree and pointed to one of the *coco de mers*, his wife had her shoulder wedged against his side as a brace. We couldn't resist taking a picture of the fellow taking a picture. Vicky and silently traded glances that expressed our joy at being able to leisurely experience such a beautiful spot on our own, at our own pace, rather than being part of a guided tour in which one only had time to see things superficially.

As our stay was drawing to a close, the kids thought of going fishing. So, we asked the owners where we might rent fishing gear. The next morning on our doorstep were four crooked poles, made of tree limbs, with line, bobbers, and hooks with a can of worms alongside. With big smiles the four of them headed to the rocky side with the deep water, just outside the back door of our cabin. Before long they had landed nine fish ranging in size from 5" to a foot. Then, as we were checking out, Vicky told the manager how much we had enjoyed our stay. When asked if there was anything more they could have done for us, Vicky said she would have enjoyed having lobster on the menu. The surprising answer was, "Why didn't you *tell* us? We could have done that easily." But, by then it was too late.

Half a month after our arrival we spotted a ship on the horizon, which to our relief was the Kampala on its way back to Mombasa. Had the Kampala not held to its schedule, It's hard to say when we might have gotten back to Kenya. Upon arriving in Mombasa, we took the train back to Nairobi this time checking into the Fairview Hotel where we had stayed two years earlier.

For the next several days we wandered around downtown, visiting the lovely and historical Norfolk Hotel located on a tree-shaded street not far from downtown and the New Stanley with its Thorn Tree Restaurant in the center of town. The place, made famous by Ernest Hemingway, actually had a yellow-bark thorn tree that rose some forty feet above the patio, where patrons sipped tea, drank the local Tuskers beer, and watched the tourists in their newly bought safari suits and hats get into and out of the zebra-striped minivans. Watching such a scene swelled our ego as being "old timers" to the African scene. It was there that we saw Peter Ustinov browsing in the hotel's bookstore. We paid a return visit to the impressive game park located on the city's outskirts on the way to the international airport. Driving past the park on the busy highway, with its twelve-foot high chainlink fence that protects the city's population from the lions and other dangerous animals. We also drove out to the Muthaiga Golf Course where we met Tony Payne who was giving instructions on the driving range. I had arranged beforehand to take a lesson—one of the few I have had. We also arranged for him to come to Addis for a week to give a couple of demonstrations and to give lessons to our membership. We thought our members would appreciate the opportunity for lessons, since there were no professional golfers in all of Ethiopia.

A year goes by and once again we took another R&R. This time we headed for Greece. Before we left, we had Themi Marinos and June, his English wife, over for dinner so that we could talk about places to visit. June had previously confided to Vicky, that we had to be careful with Themi's suggested: he would tell us about so many places to visit that it would take months to see them all. Suitably warned, we mapped out a tour that would last a month. The flight to Athens was uneventful. The city was drenched in sun as we rode the shuttle to our hotel in the middle of town, the air cooled by the breeze off the ocean. We visited the Acropolis and other sites. On the third afternoon Vicky and I left the children in the two rooms while we arranged to rent a car that we would drive around the country. When we got back, Becky was beside herself. Mike and Paul had made pests of themselves, according to Becky and Tim, so she locked them in one of the rooms giving Tim and her the adjoining room to themselves. Turns out that Mike

had opened the window to their room, looked outside, and saw a ten-inch ledge with a railing that led to the other room some twenty feet away. So, this nine-year-old walked the narrow ledge *five stories up* to the other window. Becky said she nearly fainted when she saw Mike outside motioning her to "open up." But that's our Mike, always the adventurer. Luckily Paul had enough sense not to follow.

Although neither Vicky nor I knew even the slightest Greek, We had little difficulty in Athens, since English was widely spoken in the places we visited. And I was able to follow the road signs in Athens, even after we left the city, because I could read the street signs and road maps, thanks to having been forced to learn the Greek alphabet by my fraternity at Iowa State. My vocabulary was limited to something that sounded like *ne* from sitting in Themi's office and listening to him on the phone (means "no," I think), and to *oriste*, which I think means listen. We spent two days merely touching base on some of Athens highlights: the Parthenon, Olympic stadium once again, changing of the guard in front of the Palace, and just wandering around the central square. Then we began our trip.

Stopping for lunch once on the road, we simply pointed to the cafeteria-type displays. Invariably we ended up eating the only remaining dish, which too often was zucchini in oil. Sometimes we would find someone who spoke English, but not often. Themi had laid out an extensive itinerary for us that began in Delphi and was to end on Theists, an island studded with pine trees at the northeast corner of the country. We were told that the presence of pine trees on a Greek island was rare. It was an easy drive to our first stop, where we stayed in a lovely hotel on the edge of a ravine. During a stop at a roadside gas station with a small diningroom along the way our family made up half of those stopping for lunch. The others were what appeared a small family. The apparent father put a coin in the jukebox, held out his hand to a girl of about fourteen (his daughter maybe), and they proceeded to dance to the overriding sounds of a mandolin. The song was typically Greek, their steps accompanied by his clapping, and the twirling girl reminded us of the Zomba the Greek film. We spent the next day with the aid of a

guide viewing amphitheaters and all sorts of ruins, although sometimes we just enjoyed the sights at our own pace trying to imagine what life must have been like back then.

The next day we drove northward to overnight in Kalambaka. After checking into our hotel, we explored the surrounding area and found formations of smooth limestone, with openings twenty to forty feet above the base. Various paths led to these opening, so Becky, Tim, Mike, and I climbed up to explore them. Vicky who was not into such sport stayed below with Paul, who was not happy seeing the rest of us doing something he too wanted to do. Should we have slipped we would not be able to stop ourselves so we were careful. While a fall might have resulted in a broken bone or two, I doubt if it would have been life-threatening.

Meteora was just a few miles away. So, we took our time getting up and on our way. This astounding geological area is the site of huge rock outcrops towering up to 600 meters above the valley below. Atop some of these are monasteries dating back to the 16th century. We arrange to go to the top of one of them. But before we do, Becky and Vicky had to pull sweaters over the bare arms and shoulders, borrow long, wrap-around skirts, and to cover their heads—all in the name of modesty, since monks current live and worship in the rooms some of which we would be visiting. Even then, there were places we could not enter and Vicky and Becky could not view. Years gone by, we are told, the monks reached the top in baskets attached to ropes attached to wenches or by treading up the stone steps cut in the rock. Even now supplies are hoisted in baskets. We were able to reach the top of one of them via a bridge part way up then walking the rest of the way on winding stone steps. Once on top, we viewed rooms simply adorned with religious artifacts. The view of the surrounding area was breath taking.

Our journey continued west to Innonina then north to Kastoria, near the Albanian boarder. On the way to the latter, our car began to misfire. Having had over the years experience with malfunctioning cars, I was not overly concerns nor did I want to go to a garage. So, once in town we found a park where we ate our packed lunch. When we stopped, no one

was in sight, but as soon as I had raised the hood and began tinkering with the fuel pump we had company. One of the group, who looked to be about thirty with the countenance of a craftsman of some sort stuck his head under the hood next to mine. With a lot of pointing, hand signaling, and a few one syllable words, I got the message across that the car had a fuel problem. He gently moved me aside so he could take a closer look. Before I knew what he was doing, he had begun to dismantle the carburetor. When I tried to stop him, he simply smiled and kept at the task. I looked over at Vicky who had a worried look on her face and shrugged, so much as to say, "What can I do." In less than a quarter of an hour, our mechanic had put the parts back together then he motioned for me to start the car. When I did, it started right up. Then with more hand signals and a couple of words I learned that he wanted to check the car out to see if he had fixed the problem. So, I moved over to the passenger side and let him drive. He drove out to the main city road that bordered a road lined with beautiful pine, then accelerated. As we got up to 80 miles an hour on a clear stretch of road I began to wonder what I had gotten myself into. Was I being kidnaped? Would he wreck us? Then as quickly as he had begun his test, he slowed down to a normal speed, and drove back to where Vicky and the kids were waiting. The car had performed beautifully. Unsure of the monetary implications of his help, and remembering the number of times we have been fleeced during our travels, I offered him a \$20 bill thinking this might be a fair sum in this part of the world. But he rejected my repeated attempts to give him the money. He smiled and simply said, "For friendship." That was it! We then found a wayside hotel where we could stay the night.

The next morning we headed straight east for the major port city of Thessaloniki, on the northern edge of the Aegean Sea. Then the short drive to Kavala, where we turned in our rental car and boarded the ferry for Thasos where we were to stay for two weeks. These had been easy drives of around 100 miles. Apart from its many islands, Greece is a small country.

The resort on Thasos catered to middle-income groups, most of whom came from other European countries. Facilities and our rooms adjoined an ample, sandy beach. Our meals were served to us under an extensive grape arbor alongside the beach. By the time we arrived, my

system had been saturated with olive oil, to the point that I began to feel bilious. Neither was the popular retsina wine they served us to my liking. The taste reminded me of the resin block used on violin bows that I, as a kid, nibbled perhaps twice, but no more, to find out what it tasted like. Then there was the candid sandwich that I tried a few times after our first arrival, and liked. This was simply a ham and cheese sandwich, but dipped in a French-toast-like batter, and browned on both sides. Perhaps I didn't notice at first, but on Thasos, I watched as my fork cut into the sandwich and saw, or thought I saw, olive oil oozing out from under my fork. The sight sickened me. No more candid sandwiches after that. But by the end of our stay, my system had adjusted to the shock of olive oil, and my appetite returned.

Our stay on the island consisted mostly of swimming, lying on the beach, eating our three meals a day, and resting. No parties or festivities. We talked to a few that we got to recognize, but struck up no meaningful friendships. One day a burly German strolled near us with a large dog on a leash. When one of the kids showed an interest in the dog, he took on a serious look and said in a thick accent, "Don't touch. Dog bite." We believed him. At one end of the beach was a retaining wall about ten feet above the water. I swam out to the area to test the depth of the water below it and found it deep enough to dive into. Always liking to dive I tried it out. The trick to diving from a height such as this is to spring out looking at the horizon, rather than to the spot where one enters the water; otherwise, one invariably enters the water partially on one's back. (I recall explaining to Vicky shortly after we first met and she dove off a three-meter board and landed partially on her back, that she should keep her head up. That the head controls the body. Unfortunately, I forget to tell her to duck her head just before she entered the water, something that I had learned to do instinctively. She hit the water with her head still looking forward. The result was a slightly wrenched back.) Well, after a couple of dives Mike and Tim joined me. Tim, screwing up his nerve, jumped in, which I had expected. But then Mike got up and dove in head first following my example. I don't think he realized how deeply such a dive would take him, for he came up wide-eyed, spitting water, but with a big smile on his face. To break the routine, we sometimes caught a ride into the small, picturesque village not far from the resort, had lunch, and walked back to the resort.

Occasionally some of us would swim out to a fifteen-foot square platform anchored fifty yards from shore. One of these times Vicky and I struck up a conversation with a European who had recently been vacationing in the States. He told about some of the riots against the Viet Nam war, as well as riots, going on back home. His story of a stabbing in the middle of downtown New Haven Connecticut was shocking. Sitting there in this northern part of Greece, the sun gently playing off the waves, and the swimmers enjoying themselves, I thought "How pleasant. How peaceful." And the thought of eventually returning to the States, created a sense of fear that I did not feel in this part of the world, nor in Ethiopia. Moreover, after more than four years away from home, we felt that we had more friends in Ethiopia than at home. Of course, we maintained contact with the closest of these, but we had lost touch with many others.

When time came to leave, we caught the hour's ferry ride back to Kavala where we boarded a train for the long ride back to Athens. Striking were the miles and miles and miles of smooth, white granite dotted with black specks that formed the hills and low mountains to the west and, during the first part of the trip the blue Aegean Sea to the east As we got into the journey a porter came by selling inexpensive six-inch skewers with small bits of pork kabob. The children took such a liking to them that we either ate up the porter's supply, or he figured he needed to save some for the rest of the passengers. I don't think I've tasted anything better.

We spent the last six days of our vacation at Glifadha, a beach resort south of Athens that had been recommended to us. The experience was pleasant, but not on a par with other places we had been. The modesty of our two rooms was not a bother. But the hotel was several blocks from the beach. And, being near the airport, we had a feeling during the night that the planes taking off and landing were passing in one of our windows and out another. We took advantage of this stay to try the many small restaurants in the area. With the fine, warm evenings that prevailed, we noted the many families strolling the streets and eating under the restaurants' arbors. We got the feeling that Athenians did not stay home at night, but strolled the streets, eating and drinking, or simply enjoying the balmy evenings.

By the time we returned to Addis, well rested and ready to return to our life there, it was time for me to begin looking at what I would do once my contract expired in just ten months. I had become superficially known as an Ethiopian *expert*, simply because I had been working with the Government for so long. New combers were often referred to me on that account. The task of telling them about the country, its problems, and opportunities was not demanding. I could have rested on these laurels . . . and stagnated. But that was not appealing. I wanted to associate myself with some first-rate organization where I could grow professionally. Thus, it was not for dissatisfaction with Ethiopia, my colleagues, or our life style; it was this desire for something more challenging.

About this time, I received a letter from Max Stanley, president of Stanley Engineers. He was the one who had invited Lowell Titus and me for interviews with his consulting firm in Muscatine, Iowa. His letter informed me that he and his wife would be coming to Addis in the near future and wondered if we could get together for lunch. His reason for visiting Ethiopia emanated from his philanthropic interests. He had met Endelkachew Makonnen, an Ethiopian aristocrat who had been the country's Ambassador to Britain and a Permanent Representative to the United Nations; in 1972 he was Africa's candidate for the position of UN Secretary General. Haile Selassie called Makonnen back home in February 1974 to become the country's Prime Minister. The intent of his return was to help placate disgruntled students and striking workers. The move was ineffective. Just five months later, the Derg (a rebellious group that overthrew Haile Selassie) executed him.⁵ We had a pleasant lunch at the recently built Hilton Hotel. Besides telling me about his Ethiopian contacts, he went on to describe Lowell's international activities.

The Harvard group certainly qualified—in spades. But my association with DAS was off and on because of Gray. If he weren't in the act, I think my absorption into the group would

⁵ Based on *Revolutionary Ethiopia* by Edmund J. Keller (Bloomington, India University, 1988.)

have been smooth since I got along well with Mead, Dodge, and Goering (in fact we still trade Christmas cards with Jim and Shirley Goering), with DAS director, Lester Gordon, as well as their close working associates, Bruce and Marinos. Moreover, Tekalign was anxious for me to come over to Planning. Before he took over from Belay, the latter had asked me to join Mead and Bruce as a small unit to advise him in his new position as Minister of Land Reform. So, my status within Planning, and beyond, had become established. But Gray was in charge of DAS on the ground; and that was what counted. The World Bank came up again as a possibility. I had had several contacts with Finsaas, a Norwegian who was the Bank's representative in Addis. Tekalign told me that Finsaas had agreed for the Bank to fund my appointment with DAS, but for some reason wanted to hold off because he was still working on the details.

Meanwhile, time is growing short, so I began thinking about a university professorship--something that had been on my mind for some time, although I turned down the possibility right out of Stanford because I wanted to gain overseas experience. That desire had now been satisfied. So, I first wrote to Vince Roggeveen asking about the possibility of getting into academia. He answered quickly with the disappointing news saying he thought my chances were slim saying, "You're out of date, too old, and too expensive." I might have guessed, since I knew he tended to be a "downer." In mid-November I wrote to Sandy Thayer asking whether he thought I had a chance at becoming a professor and, if so, where I should look. Sandy and I had worked together, even shared an office, at SRI. He was the one who had encouraged me to get a PhD. He was now a full professor of Industrial Engineering at Colorado State University. Shortly, I was surprised to receive a reply saying that CSU might have a position there. A group within water resources had been dickering with the World Bank about a project in Mexico and was looking for a team leader. When Sandy described my background, including my abilities in Spanish, they became interested. When I told Ken Eubanks, who had been a department head at Fort Lewis College in Durango, Colorado, about the offer, he said that was an opportunity I couldn't refuse. So, I pondered the alternatives, which at that time were joining DAS with World Bank funding, accepting a position with DAS that was opening up in Malaysia (a pleasant thought), or joining CSU. Ken's enthusiasm and the excitement of becoming a

professor favored the latter, but only as Ken insisted, I be put on the tenure track and be offered the position of Associate Professor.

To cut the story short, after a long-distance talk with Sandy and Ev Richardson, I wired back my terms, which CSU accepted; and s eventually signed a contract; Richardson was a senior water resources engineer in charge of CSU's proposal to the World Bank for the Mexican proposal. By February I informed Hailu, Tekalign, Gray, and Ernst of my decision that I would be leaving at the end of my contract in June. Tekalign was the only one upset by this news. He was especially put out with Gray for "losing" me, while also blaming World Bank bureaucracy for delaying things. I think Gray was glad the way things turned out, but it got back to me that the scolding Tekalign gave him didn't set well.

Whatever hard feeling about my decision to return to the States were not evident at the dinner party Hailu arranged for me and the family at the Hilton. About fifty were there. Hailu paid a nice tribute, saying something about how I could negotiate with the devil based on a benefit-cost analysis without losing my cool. He then gave Vicky a solid gold pendent and ear rings and for me a heavy, gold tie clasp with the image of the Emperor on it. As I shook hands with old friends, Zewdie came up to say goodbye. He had had too much to drink. And it dawned on me that in all my time in Ethiopia he was the first one I had ever seen drink too much. Interestingly, we were to see each other again. Later, as I reflected on this evening, I realized that long ago I had ceased to notice skin color. I saw the individual and considered the character, not the outward appearance. As noted earlier, this transition was made easier by the European features of the Amharas. At times, sitting in church, I would notice an individual who reminded me of an acquaintance back in the States, even a relative. More striking was Tsehay, one of the Tech Agency's secretaries who, as my stay grew longer, reminded me more and more of Sofia Loren. Should this sound extreme, I suggest the doubter to check out Liva Kebede, the lovely Ethiopian fashion model.

Afterward

Seems as though I had walked away from a solid position in Ethiopia, what with being associated with the prestigious Harvard group and with the strong support of several ranking Ethiopian ministers. But that favored position would have soon disappeared. In September 1974 the *Derg* (an Ethiopian rebel group of long standing) led by Mengistu Haile Mariam overthrew the Haile Selassie regime, threw the Emperor into prison, and brought in a communist-style government with the aid of the Russian, the Cubans, and other Eastern Block countries. So, had I remained my time there would have been limited to about two years. And I might have had to look for work elsewhere. On the other hand, had my work with the Harvard group gone well, I might have found work with them elsewhere. Or, if not with this group, having worked with them would not have looked bad on my resume. Years later, while in New York City interviewing for a position with the Ford Foundation, I met Gray there. I lost the position, which involved living in New Delhi and advising the Government about its investments in public works. My name had come up through Stanford and my participation in the Ford-funded program there. Vicky wasn't anxious to return overseas after having spent so little time back in the States, and I worried about losing my position as a faculty member with CSU. All told, the interview did not go particularly well. It is possible that Gray might have dealt the fatal blow. I'll never know. Just another one of those "What if's." when one looks back on one's career.

After our my tour of duty in Ethiopia had ended and we were in Colorado, Vicky received a call from Ashenafi who was in New Your City as part of an official delegation. He asked for me, but I was not at home. She then asked how I could get in touch with him as soon as I returned. He signed off abruptly without giving a number, as though he had been interrupted. We never heard from him again. But we did hear through friends that he had become Minister of Finance, but then was thrown in prison where he remained for many years before finally being released.

Hailu, who had become the Minister of Public Works, then headed the Council of Ministers, weathered the revolution and was high up in the Workers' Party in Mengistu's regime. When that regime was toppled in May 1991, Mengistu with fifty members of his family fled to

Zimbabwe where he remains to this day. Many others of the *Derg* and the WPE were unable to escape; some were executed. Hailu, anticipating such an event took refuge in the Italian Embassy where he eventually hung suicide. A few years later, when I wrote to Ato Tekalign on another matter, he said that Ato Hailu needn't have killed himself, since he had never fully bought into the murderous practices of his ultimate boss and was generally regarding as a compassionate and moderating force within the regime. What a pity! Earlier, Hailu had written to me at CSU to ask if there were scholarship funds for his daughter who wished to study in the States. I replied that scholarships were rare for foreign students at the undergraduate level and, unfortunately, I let the matter drop there. Pity. Tekalign fared better. He had become Minister of Transportation, then sensing the growing turmoil fled the country. In time he became Vice President for Finance with the African Development Bank in Abidjan. On one of our return trips to Africa, we learned from a fellow passenger on a flight to Nairobi that Tsdala had settled there. Our schedule didn't give us enough time to look her up. Too bad because I would have liked to see her again.

May 25, '17

Chapter 7: Going Home . . . Again ¹

On Friday morning, June 23, 1972 Hailu, Woldu, and our driver came by to take us to the airport. Little needed to be said at this point, since a lot of thanks you's on both our parts and remembrances had been said at our going away party. Still, it was a moving moment, given that I had been associated with the Tech Agency for so long. We parted then got in line to board an El Al flight to Tel Aviv.

After we had checked our luggage and cleared passport control, which were perfunctory, El Al security took over. And that was anything but routine. After a thorough body and carry-on check, a pair of Israeli security types courteously, but soberly questioned us at length as to our residency in Ethiopia, why we were visiting Israel, and what was our final destination. We had to pull off the lense to our camera then click the shutter. Satisfied, they let us proceed to our plane about two hundred yards from the terminal. When we reached our plane on the tarmac other EL Al security asked us to identify our bags. They wanted to know if we had packed the bags ourselves and whether anyone had asked us to carry a package on-board either in our checked baggage or in our carry-ons. We said, "No," and they let us get on the plane. These procedures must have taken two hours. But we didn't mind; the whole process was reassuring.

After we had boarded the plane, but before takeoff, Vicky whispered to our four children, "If you hear anything that sounds like gunfire, "Hit the Deck!" They all thought it a joke, then quickly grew serious as they realized that this could be for real.

Our plane took off at noon; It was a short, uneventful flight up the center of the Red Sea. While we never felt in real danger, the pilot kept our plane well away from either shore, since a peace treaty still had not been signed between Egypt and Israel. We landed in Lod International Airport just three weeks after three members of the Japanese Red Army shot up the terminal killing 26 and injuring dozens. As we walked from our plane to the terminal we noticed armed

¹ Thanks to Google for help with names, places, and dates.

Israeli soldiers with machine guns at the ready *everywhere*. As if we had entered a war zone, which I guess it was.

Vicky had arranged for a four-day package tour before we left Ethiopia. Our contact was waiting for us as we entered the arrival hall holding up a large sign with Shaner written on it. He had arranged for transportation to the hotel where we would spend the night in Tel Aviv. How pleasant to have things go as planned! Still, we might have expected as much. My contact with the Israelis in Ethiopia had found them both skilled and professional. Israel had shocked the world in the spring of 1967 with its quick dispatch of the joint-Arab armies during the six-day war. Long before our arrival we had heard impressive stories about how the country had in such a short time converted formerly unused mosquito-ridden swamps into productive agricultural lands. High technology seemed to prevail, from water conservation using drip irrigation (quite new at the time) to energy conservation by means of the many roof-top solar panels for heating household water. But such accomplishments from an economic development perspective should not have been a surprise, given the great cadre of well educated professionals who had streamed into the country in recent years.

Our hotel structure was common place, the ambiance stark, and the food bland. Still, it was clean, the beds comfortable, and the management accommodating. Once we had settled into our two rooms (one for Vicky and me, the other for the children), we strolled up and down the streets, again feeling impressed with the modernity of our surroundings. Then we wander down to the beach a few blocks from the hotel. The narrow stretch of beach, which had only a few bathers, was not particularly inviting because of the coarse sand and murky water.

Early the next day we bordered our bus for the climb up to Jerusalem. The well-kept paved road wound past pleasant looking olive groves, gardens, and attractive homesteads. Their serenity of the areas we passed through made it hard to believe we were literally in a war zone--a big contrast from our "greeting" at the airport yesterday. Once we arrived in the city, we passed through winding streets until our bus finally deposited us in front of a straight-walled, three-story hotel in the West Bank just east of Jaffa Gate. At the time, the fact that it was run by Palestinians escaped us.

The next morning we began our visit to some of the "touristy" sites in Jerusalem: the Garden of Gethsemane amidst a small grove of ancient olive trees, the Wailing Wall, the

courtyard where Jesus was brought before Pontius Pilot, and the Dome of the Rock, which we were allowed to enter, We ended the day by walking along the Via Dolorosa—a crowded, narrow street with many small shops. Our tour guide, a Palestinian, impressed us by his knowledge of the country, its customs, and religious history, as well as his command of so many languages. He told us stories, made jokes, and even sang a few songs—all to liven up things as we passed from one site to another. If he favored the Arabs over the Jews, he did not show it.

The following day we took a short, circular trip that began by going south to visit Jesus's birth place in Bethlehem, then a short distance further south to Hebron where we saw the Tombs of the Patriarchs Abraham, Isaac, and Jacob, and Matriarchs Sarah, Leah, and Rebecca. As we entered the main building we were surprised to see Israeli guards stationed on the three-story roof tops across the small plaza. Guns at the ready. From there we drove east through the Israeli Desert. Along the way our guide pointed out the barren cliffs where David was said to have fought Goliath and the site of the Good Samaritan. We were struck by the harshness of this area: scarcely a living thing (plant or animal) did we see. We thought of Jesus's forty days and nights in the wilderness and the widely reported death in 1969 of popular Episcopal Bishop Pike from exposure after his car broke down and he wandered off in search of help. His recent bride went off in another direction and was rescued.

Then, on to a beach resort at the Dead Sea where we stopped at a large bath house that had seen better times. Even so, the location was popular for those going there for the perceived healing effects of the mud pits and salt water. We all donned rented bathing suits; however, swimming was difficult. The high salt content of the water smarted our eyes and any water that got into our mouths caused us to gag. The water's buoyancy forced out bodies half-way out of the water. Consequently, we did little more than bob up and down, which got old before long. From there we drove north to the sleepy town of Jericho. It seemed an out-of-the-way place with dusty roads, abundant date palms, and few people or vehicles in the streets. The quietness of the place seemed to belie the historical importance of the place. Perhaps, it was due to the late-afternoon heat. We drove past crumbling stone walls that looked ancient. Still, being made of mud brick (not an uncommon practice in the area), they might not have been old at all. Then, back to our hotel. We had covered many sites of historical interest and political importance in such a short time. But then, this is a small area.

The next day we drove north along a well-paved highway to the Sea of Galilee. The place had the atmosphere of a summer resort with beach houses, boats, and many visitors. The Golan Heights to the east of us. Again, it was difficult to imagine this place as being either a center piece of Christian history or the site of recent conflict between Israel and Syria. We were back in our hotel by mid-afternoon. After a short nap we happened to glance out our window and saw an elderly shepherd tending his sheep and goats. One of the goats was standing on is hind legs nibbling the leaves of a thorny bush some six feet above the ground. Opening the window to gain a better view, we could hear the shepherd making various low, guttural sounds and whistles as if talking to his animals. The animals must have understood because they followed him as he moved on. The scene brought to mind the Sunday School readings I had heard about the *good shepherd*.

It was in our hotel that we spotted an elderly gentleman in a wheelchair being guided through the lobby with several hovering around him. Later, we learned that this was E. Stanley Jones, the great Methodist missionary to India. He had suffered a serious stroke that left him physically but not mentally or spiritually handicapped. He died in India the following January, but not before World Outlook, the Methodist missionary publication, had named him Missionary Extraordinary. Imagine, seeing him here in the Holy Lands. I vividly recall his name from the many times our dynamic Methodist minister in Ames had quoted him. I have no doubt that these sermons provided the inspiration that led to my career in international development.

The next morning we packed so as to be ready for our afternoon flight to New Delhi. Such a short stay did not do justice to the great historical significance of the place. We only touched the most touristic of the Holy Sites. Still, we had seen a lot. Before long we had landed in Tehran as one of the scheduled stops. This stopover gave us a chance to wander around the waiting lounge. Though brief and superficial, the richness of the culture of this ancient civilization showed through. Knowing what a significant role Iran was to eventually play in world politics, it would have been worthwhile staying over for a few days. But, all was peaceful in Iran with the US-friendly Reza Pahlavi as the head of state.

We were sleepy-eyed by the time our plane touched down in New Delhi. Our overwhelming impression of India was its crowdedness. So many people. It began before we even reached the airport terminal. As we slowly made our way to its entrance a frail, little lady who looked to be in her seventies kept pressing me in the back with her forearm, even though I was unable to move ahead any faster than I was. Finally, I turned around to tell her that her

shoving was doing no good. And she just looked up at me with a sweet, toothy, betel nut-stained smile. Welcome to India, I thought to myself.

We checked into the AID guest house, a rambling and lovely hotel with spacious rooms. The complex sat on several acres of land on the outskirts of New Delhi, It had all the amenities one could wish for: first-rate restaurant and bar, a nice-sized swimming pool with a one-meter diving board, a bowling alley, a soda fountain, a game room, and a comfortable reading room with a small collection of books. What added to our kid's excitement was the presence of others their own age. We felt fortunate to have gained access to such a place, since we were a contract family not part of AID or the Embassy. Our connection had been AID's Personnel Director in Addis, who had wired ahead about our pending arrival. He had only recently been transferred from here, so he knew the local AID Director.

After we got settled and turned the kids loose, I called the AID Director's office, told the Director's secretary who I was, and was put through immediately to him. This surprised me, since the AID Mission here was large because of India's strategic importance to our government's foreign policy. In recognition of this fact, John Kenneth Galbraith had been President Kennedy's Ambassador to India from 1961 to 1963. Still more astonishing, the Director invited Vicky and me to his home for lunch the next day. He said he would send his personal driver to pick us.

The Director's chauffeur drove up at the appointed time in a shiny black town car, then drove us several miles to the Director's home. The house was located in a lush, tree-shaded suburb with the elegant homes occupied by former British civil servants. Now, most certainly, it was "Ambassadors' Row." We were met at the door by a dark-skinned Indian servant decked out in white jodhpurs, long coat, and head dress. He ushered us into a large sitting room with a high ceiling, potted plants throughout the room, the air cooled by huge ceiling fans. The AID Director, his wife who looked like she might be half Indian, and an elderly friend soon came into the room. The friend turned out to be the sister of E. Stanley Jones! After we introduced ourselves, we sat down to a well-prepared, but light lunch. They asked about our African experiences, how their friend was getting along in Addis, and what we planned on doing once back in the States. We, in turn, asked about India's progress since winning its independence and about Jones's missionary career, noting that we had seen him in Jerusalem.

With that wonderful experience under our belts, I holed up in our spacious hotel room with a rented typewriter and began working on the paper I had committed to read at a Conference on Technology Transfer to be held at Colorado State University shortly after our arrival there. The paper, based on my Ethiopian experiences was titled *Some Problems Associated with the Use of Expatriate Advisors in Developing Countries*. By the second day I had completed a draft to my satisfaction. I got Vicky to type the final version. Then I arranged to have AID include it in the next *pouch* to the States, glad to have that obligation out of the way

My recollection of downtown New Delhi was from the two trips we took there. For the first one, Vicky, I, and the children crossed the street to a "taxi park," so as to avoid the higher price charged by taxis outside the hotel's entrance. We approached the driver of a brightly polished, but old vehicle. He wore a large turban, had a full sweeping mustache, and surprised us by his European look. His features and white skin suggested he was of Aryan stock. After a short haggle over price, he agreed by gently wagging his head, a gesture that might have been confusing. But Vicky and I remembered Bredo telling about a meeting he and another SRI team member had while presenting their final report to a group of high-ranking Indians. As they delved into their presentation, they were brought up short by what they thought to be serious disagreement with their findings. They were seeing this same wagging of heads. Being new to India, they misconstrued the meaning of this gesture.

Our driver deposited us in the middle of town at an Air India office. There, we confirmed our flights to Jaipur, Agra, and Kathmandu. The agent told us that we must go to the Nepalese Consulate in town for our visas. But before going there, we walked a short distance to a bank with a foreign exchange window so that we could replenish our rupee supply. We all worked up a sweat as we walked the few blocks to the bank, for the temperature must have been 120 degrees. As we walked we passed men dressed in their white pegged pants and loose white jackets. The women typically wore colorful, light-weight saris that they draped around a bodice. The effect would have been attractive were it not for the oft-present roll of fat around their middle.

It was a relief to walk into the air conditioned bank. The *everyday* teller who cashed our travelers' checks was pleasant enough. He said that India welcomes visitors such as us. But he wasted little time in telling us his dissatisfaction with US policy toward India and our support of Pakistan. Vicky and I found it strange that the teller should so quickly and easily tell us what he

thought about the USA. Perhaps, we wondered, India's crowdedness bred familiarity, but then we thought of New York City.

Back on the street, we hailed another cab that took us to the Nepalese Consulate, located in a pleasant residential area. The Consulate was in an old three-story house set back from the street with a large tree casting its shade over the building. We walked up the stairs to the second floor and entered a dimly lit office with a light breeze coming through the partly-drawn blinds. Although not air conditioned, the room was not hot. We got the visas we needed then walked to the street in search of a taxi. The only for-hire vehicles we could find were motorized rickshaws. These are small, flimsy two-seated, three-wheel affairs with a two-stroke engine. The driver we approached said he could not take so many, but we persuaded him by offering him more than his regular fee. So, we all crowded in. The driver sat off to one side, almost outside the vehicle, Vicky and I squeezed in beside him, and *all four* children sat in the narrow space in back—Paul on Becky's lap and Mike on Tim's lap. We were surprised by how wide were the main arteries in the modern part of the city. Our driver dexterously threaded his way through the maze of old and new autos, bicycles, and rickshaws—not the safest feeling, given how little protection we had should someone hit us.

We took the next trip downtown to see the famous Red Fort. This was a complex of buildings that dates back to the seventeenth century: an impressive edifice with tall, handsome guards dressed in colorful uniforms and headdresses, that reeked of the Mughal Empire and Colonial times. We took a guided tour through some of the buildings. Afterwards, we strolled along flower-studded paths amongst the grounds that surrounded the buildings. More than once while doing so, young Indian teenagers approached us asking for money. After living so long amongst the poor, we had become somewhat inured to such solicitations. But persistent they were. Listening to them, and others, talk, we noted how the Indian pronunciation differs from ours, especially the way they stress syllables differently than we do. For instance, Indians are prone to say *sy-LAL-able* instead of *SYL-able* as we do. Listening to them reminded us of the story that said "English was born in Great Britain, grew up in America, and died in India."

The next afternoon, we flew to Jaipur in the state of Rajasthan south of New Delhi where Hemith's wife, Jane, met us. She informed us that Hemith was on active military duty again. During the previous December we had read a story in the New York Times about the Pakistani-Indian war. There on the front-page was a picture of Hemith having his "afternoon"

tea' while sitting on a Bangladeshi farmer's haystack close to the front lines. By then, he was General Singh.

From the airport Jane first drove us to their home on the outskirts of town. Though she and Hemith came from established families, we were surprised to see their house. Located on a barren plot of land it was an old three-story, wooden structure that badly needed a coat of paint. The rooms that we could see were modestly furnished. Women and children wandered in and out of open doors. They acted at-home, so they must have been both members of the extended family and servants. Having shown us her abode, Jane drove us to the nearby "country club" where Hemith played golf and she and he swam and socialized. The swimming pool surprised us. It was simply a large concrete tank set completely above ground. The pool's murky water tinged green by the algae below was not inviting. Still, in the heat of this desert, the pool must have been refreshing. Vicky and I wondered at the contrast between Hemith's impressive heritage and military position and the simplicity of his and Jane's living conditions. Certainly, privilege did not translate into conspicuous living.

Once Jane had served us tea and biscuits, i.e., cookies, she drove us to the hotel where she had made reservations for us. It was an expansive place that had seen better days from the time it had been the mansion of some raj. It also needed a coat of paint and the swimming pool was dry, except for a foot of dirty water strewn with leaves. We were given what seemed like a small apartment with several rooms and narrow, interconnecting passageways. It seemed as though we had the whole third floor to ourselves. The owners were accommodating, the waiters, dressed in white jackets and pegged pants and wearing peaked white caps, were charming, and the food delicious. Our full-blown afternoon teas were straight out of colonial times! One of the waiters showed us how to fix the large mangos that were available with our noon and evening meals. The trick was to cut the mango around the circumference at the largest point, twist until the two sides separate, pull them apart, use a large spoon to dip out the fruit from the part without the seed, and use a knife to free the seed from the other half. This allows the mango, which are sinfully delicious, to be eaten without all the mess.

Jane picked us up the following day to show us more of the city. She took us to her family-owned batik plant where we saw perhaps fifty workers designing fashionable dresses and blouses, carving the batik patterns, stamping the sheer cotton cloth with the dyed blocks, cutting along the patterns, then sewing them together. Jane said that part of the family lived in London,

where their popular clothing line fetched top prices. She said she goes there about once a year. As gifts she let Vicky pick out a light-weight, flowery skirt, as well as an 24" x "18" batik cloth to be framed as a wall hanging.

From the plant, Jane took us to a small museum that included paintings of Hemith's grandfather in royal regalia leading a celebration on the back of a large, bull elephant. She said that Hemith Singh's family had enjoyed positions of power down through the ages and that Hemith, with his Sandhurst training and rise to the rank of general was carrying on the family's traditions. Thus, it seemed that the marriage of Hemith and Jane was a happy union of near-royalty on his side and a modern, entrepreneurial family on her side.

Around dusk she drove us to the main bazaar with its thousands of lights strung from the store fronts and cris-crossing the street. In front of the stores were the many craftsmen in gold, silver, brass, and copper. We watched as one of them melted colored laquer into a circular, brass coffee table, which we ended up buying. Somehow the setting seemed strange to us. And rightfully so. The storefronts were simply facades—a veritable Potemkin Village!

For our last day in Jaipur, we arranged for a driver to take us to the Amber Fort, situated on a hill not far from town. Its rough exterior of red sandstone masks the elegance of the interior that includes gardens and white marble inlays. The fort, built in the late sixteenth century was the region's capital until replaced by Jaipur some 150 years later. As memorable as was our guide's explanation of the Fort's history, the elephant ride from the parking lot at the base of the Fort to its main entrance was even more so, for this was the first elephant ride for any of us. We sat in baskets alongside the elephant driver and watched as he guided this huge animal with jabs of a hooked rod and kicks of his heals. A distinguishing feature of these Asian elephants is their ability to be domesticated, as well as their relative smallness—as compared with the larger and wilder African elephants.

From Jaipur we flew to Agra to see the Taj Mahal.. That night we stayed in a small motel not unlike what one might find in the States. A major difference, however, was the power kept going off. One of the guests, who knew India well, explained that the problem was an overloaded power grid.. He said that when the British were running things, such outages did not occur. But that once the Indian government assumed ownership, routine maintenance and system expansion to meet growing demand had not occurred due to the shortage of funds.

The next day we visited the elegant Taj Mahal. Standing a distance from the structure itself with the extended pools of water and fountains in front, one can appreciate the elegance of the place. The scene under full moonlight must have been breadth taking. However, upon closer inspection we saw that the structure had suffered the ravages of time, which included plundering by conquering armies. Our guide, with a mixture of pride and chagrin, pointed to the small dents in the walls, which he said had once held the most precious gems. He literally willed us to close our eyes and imagine how the Taj Mahal must of looked during its time of glory. Eventually, Vicky concluded that *most* of India has seen better times.

The next day we boarded propeller-driven Air India flight for Kathmandu. Our plane waited on the tarmac for nearly an hour before clearance was given for us to take off. To save fuel, the pilot turned off the air conditioning, which in the heat of the day made our wait even hotter. The lukewarm Fanta (orange flavored drink) did little to quench our thirst. Finally, we were cleared to take off. Once we gained altitude, our hostess offered us each a cheese sandwich between two dry slices of bread. By this time we were spitting cotton, the sandwich balling up in our mouths. Only the small cups of tea our hostesses served us made it possible to swallow. Definitely not first-class fare. But the flight was not long and we soon landed at Banaras on the Ganges—one of the Hindu's holiest of places. It would have stayed so that we could spend more time in this historic city.

From there it was a short flight to the mountain kingdom of Nepal and its capital of Kathmandu. We stayed in a charming, second-class hotel with its rambling porches, wooden walkways, and art objects. During the next four days we strolled the streets, looked at the abundant, white-washed stupas, some with the wide staring eye, the holy temples with their burning incense candles, the "wheels of life," and the many American and European hippies that roamed the streets. It was inevitable in our innocent wanderings that we could eventually come across one of the city's many kiosks where erotic Hindu love scenes were clearly depicted around the top of the exterior walls. These scenes had escaped Vicky's and my eyes, but not our children! Wondering what Tim and Mike were snickering at, we took a closer look. By that time, there was not much we could do but gaze in surprised wonderment along with them.

Our food at the hotel was typically Asian, which the children accepted without great complaint. The principal exception was a dish of boiled okra. We persuaded Becky and Tim to eat just the smallest of portions. However, Mike rebelled. He could not bring himself to put the slimy mess into his mouth. After considerable cajoling on my part, he agreed to just taste it. Fine, I got him to at least try a food that wasn't appealing at in the hopes that he would

eventually learn to experiment and enjoy a variety of foods. But my success was short lived. We had left the restaurant and were taking the covered walkway back to our room, when Mike stopped, bent over at the waste and threw up his entire dinner. So much for forcing your children to eat what's not appealing to them.

One day we arranged for a trip outside of the city to visit "religious" ceremonies along a hillside stream. The wooded area was crowded with worshipers and visitors. Along the paths high above the stream were small tents: some filled with sacred objects sold by soothe sayers and others containing caged chickens whose blood would be sacrificed in the stream below. Next to these sacrifices, men, women, and children bathed both upstream and downstream along with buffalo wallowing mid-stream in the mud. Just a conglomeration of water, bathers, blood, and muck.

From Kathmandu we took Thai Airlines to Bangkok. We had heard about the great service afforded by this carrier. The food was excellently prepared, Vicky's plate adorned by a miniature orchard, and the drinks free and ample (as was true on most international flights at the time). But we were unprepared for the striking beauty and smiling faces of our petite stewardesses. Every one of the four who tended our tourist-class cabin stood all of five feet tall, in their oriental attire looked as though they were poured into them, their skin was a just an off-shade of white, their jet-black hair neatly combed and partly hidden by their pillbox hats, their friendly smiles revealed pearly white teeth. What impressed us most of all, they all seemed to look alike, as though stamped out by a cooky-cutter.

Once in Bangkok, we checked into a modest, but spotlessly clean hotel run by the Japanese in one of the many districts of this bustling metropolis of three million people. Paul, our mimic, took delight in imitating the female voice on the intercom when she announced a call for one of the guests saying for instance, "Mr. Yamamoto, you have *tel fon caul*."

Our first line of interest the following day was to check with a travel agent to see if bookings on the Wilson Lines had been confirmed. Once assured that they had been, we then booked our flight out of Bangkok four days hence. We filled our time with guided tours around this busy and colorful city admiring the pagodas with their curved, red-tiled roofs guarded by dragons or by chow lookalike dogs carved in stone, the pointed spiral tops, and statues of Buddha. One of our tours took us to an up-scale hotel where, we watched young Thai girls in

their oriental dresses dance--they accompanied their graceful, yet contorted positions, with hand positions that accentuated their slender, long-nailed fingers that curved *backward* away from the palm an inch or more beyond the normal position. Our guide told us that these girls begin at an early age the exercises that allow them to extend their fingers in this way. The hand positions, we were told, convey the story depicted by the dance.

After the ceremony, which lasted perhaps an hour, we wandered around the hotel's lovely gardens that boarded on a canal. Off to the side several hundred yards away, was the King's multi-oared barge that he uses for special ceremonies. It too was brightly decorated. Our tour that day ended by viewing a golden statue of the reclining Buddha whose length was 47 m and height 15 m. The Buddha's expression was one of serenity, as might be expected.

Another day, we asked the hotel's concierge to book us a ride on one of the many small launches that ply the city's numerous canals. These craft are unique in that they are driven by outboard motors with propellers at the end of a twenty-foot shaft. Our tour took us up and down the many crowded and narrow canals with vendors along the edges selling all sorts of vegetables, flowers, and other items. As we passed some of the venders, it was common for two or three of them to get into their own shallow craft and come along side offering their goods for sale.

Having seen many of the recommended sites, we spent time relaxing and seeing parts of the city by taking city buses and by walking through the park near our hotel. While walking along a path in the park. crowded with vendors, I suddenly became nauseated. It was the heavy small of unfamiliar spices wafting across our path. I was the only one of our family so affected. A couple of evenings Vicky arranged for the children to be fed in our room so we could try out Thai food, noted for its hotness. We were not disappointed. In fact, in all of our travels, I don't think we have ever experienced food this hot.

Our flight to Hong Kong on Cathay Airlines was cramped. Vicky and I felt wedged into small seats, with limited leg room, not meant for Americans. But it was a short flight so our discomfort was short-lived. It was dusk as our plane approached the runway and we were shocked to see office lights from tall buildings on either side of the runway. We felt as though we were landing on a city freeway, the airport lying well within the city's limits. The experience reminded me of flying into San Diego. There, the approach was similar, where we would passed low over the center of downtown and touch down just beyond a busy freeway.

Clearing passport control was a breeze, undoubtedly the result of British efficiency and the city being an international hub for so many travelers. The shuttle took us along the streets of Kowloon, which is on the mainland, to a modest hotel in the middle of the city. For the longest time, I had thought that we were on Hong Kong Island, rather than the mainland. Our choice of hotels, where we had made reservations beforehand, resulted from Hope Sullivan, the wife of Gene who had died of malaria in Ethiopia. Hope was familiar with Hong Kong because of the many years Gene had spent in the Far East working for AID.

I think it was on one of these international flights aboard a US carrier that Tim arrogantly clapped his hands to get the stewardess's attention, much as I would go "pst, pst" to get Vicky's attention. The stewardess spun on her heals and, spotting Tim, gave him the dirtiest of look. Vicky and I apologized to the stewardess then had to explain to Tim that he was out of order. I guess he figured if it worked for me to get Vicky's attention, it ought to work for him. Whatever he had wanted, he didn't get.

With three full days in Hong Kong we had plenty of time to attend to a few necessities, as well as to explore points of interest. The most important of these necessities was to locate the shipping office so that we could once again confirm our reservations. Earlier, we had only been put on standby. It was there that we learned our departure date was pushed back a day; so, we had another day to spend here. Good. Hong Kong is both a beautiful and interesting place. Next, Vicky and I wanted to take advantage of being here to get some hand-tailored clothes. We had heard from others who knew the Far East that they would come to Hong Kong periodically simply to have suits and other garments tailor made for them. We contacted a tailor who laid out bolts of fabric for us to choose from. Vicky selected material for a suit, had the see-through skirt that Jane had given to her lined and I selected material for a suit and sports coat. Our tailor had this done in forty-eight hours! Elsewhere, Vicky bought a fall coat.

With this out of the way, we went down to the terminal to catch a ferry to Hong Kong Island. While waiting we strolled through the myriad of the terminal's shops selling items form all over the world. The free port status of Hong Kong along with the fierce competition of the sellers makes this an excellent place to shop. We boarded the ferry for the ride to the Island. We watched this excellent port in awe with its bay teaming with all sorts of water craft: fishing and cargo boats, barges, Chinese junks, and all sorts of other craft. Letting our minds wander

we could imagine the pirate ships of long ago. And off in the distance to our right we could see the large naval ships that might have been from our US Navy. Once we had a clear view of the opposite shore, we were surprised to see how many skyscrapers dotted the approaching skyline.

Once on land, we made our way to the cable car that took us to the top of the Island's hills where we strolled pathways through a verdant park. From there we rode a bus back down the hill to the famous Tiger Balm Gardens. The gardens, occupying the side of a hill, were studded with colorful buildings, statues, and artifacts. We wandered around in the heat of the day (in contrast to the coolness of our hilltop walk), bought lunch at a park side restaurant, and simply enjoyed being where we were. Before returning to Kowloon, we had dinner on a floating barge adorned with hundreds of colored lights that was anchored a couple hundred yards from shore. Even though our meal was just ordinary, we all enjoyed eating in such a place; the kids liking the boat ride getting there and back.

We took the opportunity of being in Hong Kong to fill up on Chinese food, which is one our family's favorites. We were reassured of the authenticity of the places we ate when we saw groups of Chinese sitting all around us. Groups of seven or eight were not uncommon; and the number of dishes placed in the center of the table contained enough food for twice the number of people, we thought. They chatted amiably while using their chopsticks to adeptly pick from the various dishes. The impression we got from watching them was their unhurried enjoyment of both food and conversation. The occasion for them seemed to be one that is savored, not hurried.

One of the evenings after the kids had been fed and settled in their room, Vicky and I strolled the streets near our hotel. The weather was comfortably warm, the trees lining the street were in full leaf, and people were casually strolling by. We spied an Irish pub that attracted our interest. Inside, the owner was indeed Irish, or so it appeared form his accent and the stories he told. The many people one encounters from all over the world and the stories they have to tell are what makes Hong Kong exciting. We ordered a San Miguel beer primarily because of its reputation as being "the best beer in the Far East." It was good, but then it was *just beer*. Most beers taste about the same to me, except that I find Heineken bitter and Lowenbrau smooth. The feeling we had from this short outing was one of being in a quiet suburb, rather than in the center of one of the major cities of the world. However, by looking outside our hotel window we could

see the city's crowdedness from the many high-rise apartments surrounding us and the hundreds of clotheslines with their wash flapping in the breeze.

Finally, the day came for us to leave. We were all excited as we boarded the President Wilson in the afternoon: the children especially, since this was to be their first time on a large cruise liner. With a family of our size, we had chosen three two passenger interior staterooms on one of the lower decks. Without a porthole for fresh air and a view of the horizon, the possibility of getting seasick was enhanced. Still, the ship had stabilizers and we did not expect to spend much time in our cabins. Good in theory, but the first night out on our way to Yokohama, Typhoon Rita lay in our path. The ship's crew had strung thick, white rope along the passageways and stairwells, as well as securing chairs, tables, and other movable objects. Our captain did the best he could to skirt the storm. Still, we spent a rough night rolling from side to side and pitching up and down. Half asleep, I put my hand over the side of my bunk at least once during the night as if t thought the ship were going to rotate onto its side.

By the time we entered the bay, known as Tokyo Wan, and docked at the port of Yokohama the seas had calmed down. Since we were to have over twelve hours in port, we decided to take a rapid commute train into Tokyo. The Japanese we encountered in getting our tickets and boarding the train knew enough English so that we had no trouble making the connections. The distance between the two cities is short. En route, Becky noticed a young Japanese fellow reading Love Story² in English. Since none of us knew a word of Japanese, the sight of someone reading a book in English reassured us about getting around in Tokyo.

Arriving at the rail terminal, we enquired about visiting the Imperial Palace and were told that the Palace itself was off limits, but that the area surrounding the Palace was open to the public. The entrance was just a short walk away. Soon after arriving there a rather shy young Japanese fellow came up to us, politely bowed and offered to show us around. He said he did not want to be paid; he just wanted to practice his English. We gladly accepted; and with him at our side, we leisurely explored the grounds. The black and white buildings, the arched foot bridges, the acres of green grass and shrubbery with dark pine interspersed: all this impressed us. And we marveled at how well the whole area was groomed—what one might expect of the

² A novel popular in 1970.

grounds of a Japanese Emperor. Even so, this outing left us in a sober mood, no doubt because the low, gray clouds overhead added to the starkness of what we had seen.

After we had seen enough, we took a taxi to the Ginza where we took in the early evening lights, wandered around the department stores stuffed with goods and people, and ended up going to a modest restaurant. We were hungry by this time and, wanting to take advantage of being in Japan, we ordered Kobe beef. The meal was expensive, but worth the price. We made our way to the train station and in no time at all we were back on-board ship with time to spare. During the day we had some concern about losing our way, returning late, and missing the ship's departure. But we needn't have worried. All went like clockwork. And we had seen one of the great cities of the world.

When we awoke the next day, we were well out to sea. No possible sea sickness from then on out. Without a typhoon to contend with, our large ship with its stabilizers and ballasts kept us on an even keel. We soon settled into a relaxed routine for the rest of our voyage. The ship's cruise director had arranged for the children to be essentially freed from their parents. At one point, after not seeing our kids during the day we wondered if we would know should one of them have fallen overboard. But, Becky, being a good surrogate mother, although not necessarily of her choosing, looked after Paul. Tim and Mike often palled around together and were responsible, we felt. Paul joined them as often as they would allow him. From what we could tell these were not bad arrangements. The children had their own play area including a small pool, dining facilities, their own account for charging snacks and drinks, and matrons to look after them. Except for our occasional meeting, we scarcely saw them until we were about to go ashore in Honolulu.

That left days on end for Vicky and me to be as lazy as we liked. Often, it was a worry that we wouldn't get up in time for breakfast. After that we might sit on deck chairs and read, but it would not be long before the gentle motion of the ship rocked us to sleep. I got in some exercise by doing calisthenics and walking laps around the deck. And Vicky and I both swam in the small and often crowded pool. She usually sun bathed after swimming. Sometimes we would simply lean on the rail and enjoy the ocean breeze, especially Vicky who loves the sea. At times we would thrill to the sight of flying fish streaking above the water alongside the ship's wake.

For those so inclined, long cruises can be little more than sitting on the deck reading, dozing, and talking, in addition to drinks, snacks, and three good-sized meals a day. Breakfast was ample, spreads for lunch were sumptuous, and dinner was refined elegance. But it doesn't have to be that way. There is plenty else to do.

We had our assigned table with the same group, which made it possible for us to get to know each other and have long, interesting discussions. Additionally, one of the ship's officers would sit with us each evening, but seldom the same one. The officer who sticks out the most in my memory was the ship's purser, an attractive officer in his early forties who had been sailing on cruises such as this for twenty years. Trading tales, he asked us if we had ever heard about eating *live monkey's brains*! We hadn't. So, he went on to explain how it was done. First, a small monkey was strapped in a chair, his head in a sturdy vice. Then a buzz saw would cut off the top of its head, while it was still alive, exposing a moist, still pulsating brain that were there for the eating. He explained that this was an old, Chinese custom. I think it was a wild tale to test our gullibility. His tale reminded me of the one told to me outside the library in the Seychelles about how the octopus gets the clam.

After dinner the ship offered various forms of entertainment, including several shows by a small dance band, a master of ceremonies, two singers, and a comedian. Vicky participated in a fashion show by modeling a couple of attractive oriental dresses.. And before we reached the States, the ship's captain threw a fancy end of cruise dinner in which each of those on board had a picture taken with him. So, we were never lost for things to do. The problem was staying awake after cocktails, a several-course meal, and wine.

On the fifth day out of Yokohama, Vicky and I joined about thirty others for bridge instructions given by a bridge master. We welcomed this opportunity to receive lessons again, since our last lessons had been ten years ago in Los Altos, before I began my PhD program. Our instructor spent the first hour of our three-hour sessions reviewing the basics of bridge, as well as introducing us to new concepts, such as opening a "short" minor and not a four-card major. Then, we participated in a running competition for the remaining two hours. We completed the first session before arriving in Honolulu, then repeated the process after leaving Honolulu. This time, Vicky and I had absorbed the concepts well enough to come in first among the twenty participating couples. Ever since, Vicky and I have been following what we learned during these sessions. Our prize was a small, metal replica of our ship.

In the afternoon ten days out of Yokohama we docked in Honolulu. Becky and Tim along with some of their friends caught a bus into town. Their first stop was at a McDonald's. Mike and Paul stayed with us, but wondered why they couldn't go with the others. The next day, we all rode the bus to a less crowded section of Waikiki Beach that was south east of the area frequented by guests of the big hotels. While we sat at a table at the edge of the beach having lunch, a shapely young lady walked past us wearing a string bikini. Not all female bodies look good in such a thing. But this one qualified! Vicky said it was then that she realized that Tim at 14 was coming of age, because she said he practically levitated from his seat. I wouldn't know because I was looking too.

Five more days at sea then on the sixth at noon we sailed under the Golden Gate Bridge. What a thrill to see this wonderful landmark from underneath! That was the end of our delightful nineteen-day cruise. It was forty-eight days since we left Ethiopia, and five and a half years since we first left Los Altos for my assignment in Ethiopia. During all this time Vicky and kids had only returned to the States once, quite at odds from what happens to most USA families living overseas. It was good to be home, but I also felt anxious about the faculty position I had landed at Colorado State University. During the many days of the cruise I had occasionally worried about how difficult adjustment to academia might be. But, I had succeeded in pushing such worries to the back of my mind. Now, the time had arrived when I would have to face up to this new challenge. The pleasant image of a professor's life that I had built up in my mind was soon to be shattered. As we docked, Becky and Tim said goodbye to the several friends that they had acquired during our time on the ship.

Customs was easy and we soon exited from passport control where my folks were waiting for us. Many hugs and much talk followed to make up for the eighteen months since we last saw them. Feeling good to be home and reasonably flush, I checked us into the St. Francis, one of San Francisco's fancier hotels right in the center of town across the street from Union Square and next to a cable car line. Once all was in order, I flew to Las Vegas to pick up the car we had purchased before leaving for home. It was a American Motors Ambassador station wagon with a fold-up seat looking to the back, in addition to a regular back seat. A suitable car for a family of six. I had chosen to buy the car in Nevada thinking I could escape paying California sales tax, which was correct. But after we had settled in Colorado, we were required to pay the sales tax there.

I drove back to San Francisco and the next day we checked out of the hotel and headed for Los Altos. I checked into SRI just to say hello, since I was no longer associated with the organization. We all got physicals and dental checkups, which AID requires as protection from subsequent, unrelated medical claims. We visited friends in the area then headed south to Hemet in Southern California where my folks were living in a trailer camp. We stayed there for eight days that included visits to Disneyland and Knott's Berry Farm.

Our drive to Fort Collins took us through the attractive Oak Creek Canyon to Flagstaff where we spent the night. The next day we paid a quick visit to the Grand Canyon then across the state through the Four Corners, and on to Cortez. The next morning we made another quick stop, this time at Mesa Verde. From there we drove north through the high mountain country of Silverton and Montrose, then east through Gunnison, and eventually north to the old mining town of Leadville where we overnighted. The next day we drove north to the west entrance of the Rocky Mountain National Park, through there into Estes Park, and down the slope to Loveland. It was only a short drive into Fort Collins. Along the way we listened to pop songs on the radio. One of the disk jockeys was Jim Lange, who had been one of our favorites from San Francisco. What a surprise to find he had moved to Denver. Some of the songs, all new to us, were "Every Body Plays the Fool," "This is My Last Song," and "You're so Vain."

The excitement was palpable as we drove north on College Avenue, past an A&W Root Beer drive-in and over to the Colorado State University campus. My heart was thumping as I walked up the stairs to the Mechanical Engineering Office, where I was to begin my new career as a tenure-track Associate Professor. The excitement of this mid-career change left me weak in the knees. I talked briefly with Bob Haberstroh, one of the senior members of the Department. He was curious about my reaction to the massacre of the Jewish athletes at the Olympics Games in Munich. I replied that this seemed so distant from us that it hadn't made much of an impression. I collected the keys to the Winn house, another Department member who was on sabbatical for the next year. Then I drove us a mile east to our new abode. The three-bedroom house was small for our family of six; but we could get along. Besides, by renting, we had a chance to explore the city to see where we wanted to live once the year was up.

Chap 8: Settling In

The family made the transition to life in Fort Collins rather nicely—for the most part. Mike and Paul at eleven and nine, respectively, found bright and athletic friends right across the street. The Olander boys came from a popular family in town. Their parents taught in the public school system. Both Mike and Paul played little-league baseball and football. Without any prior experience they performed well in baseball. Mike had a natural talent, playing with the town's top league at his grade level. He was a good fielder who seldom missed a fly ball and had a marvelous throwing arm. Paul surprised us when early in the first season, his coach put him in to pitch in a clutch situation. He calmly threw strikes and retired the side. Their lack of experience, unfortunately, showed up when batting. Also, Mike took naturally to little-league football; Paul was tentative in his play.

The transition for Tim at 14 and Becky at 16 was not so easy. The wiseacre kids in the middle school Tim attended told him to go back to Africa where he came from so he could swing with the monkeys. Before our arrival here we had been subtly warned that we might find Fort Collins to be a "town of wide streets and narrow minds." So, this initial experience of Tim's did not come as a surprise. Tim tried his luck at junior high football, but, beside not having played before, except around the yard at home, he had to contend with those much larger than he. Wade Troxell, one of his team mates outweighed Tim by some fifty pounds and stronger as well. Wade eventually played first-string center for CSU and later was became a full professor in the Mechanical Engineering department, an associate dean, and currently Mayor of Ft Collins. Tim enjoyed playing trumpet in the junior high and highschool bands, thus pursuing his long-standing interest in music.

Becky, entering during her junior year, often felt left out because most of her classmates had long-established friendships. During her senior year, her advisor told her that she already had most of the credits needed for graduation and, since she planned on studying art at CSU, there were few courses he could recommend for her to take. Vicky and I were not happy with the counselor's suggestions. Believing that one's career choices often change, we urged Becky to at least take calculus and chemistry if for no other reason than to find out what the subjects were like. We also arranged for Becky to begin taking freshmen courses at CSU during her senior year, which was possible for someone with her grade point average.

Our suggestions proved helpful. Besides getting a jump on college, the chemistry course was useful for the pottery course she was to take at CSU; and the calculus course awaken her latent interest in math. She ended up majoring in art (her original interest), but minored in math (an unexpected interest). Years later, she taught math in the Peace Corps, and took advantage of the Peace Corps' graduate funding to obtain a master's in math education.

Vicky, Mike, and Paul became golf champions at our country club. Tim played on the Poudre golf team, their captain turning pro and playing on the mini-circuit for many years. Becky never took up the game. But once, while playing "powder puff" touch football, she ran into a boy's elbow that blackened her eye. All four took advantage of the city's weekend ski program that bussed them to Estes Park, less than an hour's drive away. Being athletic, they picked up the sport quickly. The boys called the runs there "Hidden Rock." The full day of skiing for the children gave Vicky time to herself. Sometimes Vicky would join the CSU's women's group for a day's skiing as well.

Vicky's adaptation to Fort Collins was phenomenal, greatly aided by her natural ease in meeting people, making new friends, and her overseas experiences. It's hard to tell, but the entry point might have been the skiing trips she made with Gabriella Rider and Evie Zelly. Gabriella's husband was one of the University's elite professors, focusing on the environment, and Evie's husband was a scholar who came from the Illinois Institute of Technology and was department head of Radio-biology. These two brought Vicky into CSU's Ladies' Club. Within a couple of years, Vicky was the Club's president. As such, she had frequent association with Ginny Chamberlain, the youthful wife of CSU's young president. She also presided over the meeting where Dotty Lamb, the governor's wife, was the invited speaker. Vicky recalls introducing her before a crowd of two hundred without a quivering voice.

My adjustment was in stark contrast to the above. I came *so close* to failure. Almost immediately I began to feel uneasy, although knowing Sandy Thayer was a comfort. Bill Duff, the other member of our three-man Industrial Engineering Section, who came from SRI, was affable.¹ And Knox Millsaps, the department head, did what he could to make me feel welcome.

¹ CSU had tapped Sandy from Stanford's Industrial Engineering program to develop a similar section in the Mechanical Engineering Department. That never happened, though we

The first shock came when I prepared to give my paper at the Conference on Technology Transfer, the one I had written while in New Delhi. The night before I was to give the paper, the Millers, our next door neighbors, had invited us to dinner. But I, not feeling prepared for the delivery, begged off at the last minute, even though I had had plenty of time to get ready beforehand. Guess, I simply grew nervous at the last minute, for I was up till 3:00 a.m. giving the paper to myself and trying to anticipate any questions that I might be asked. What virtually paralyzed me was the fear that I wouldn't remember the points I wanted to make or their order. As it turned out, I was needlessly bothered. My presentation was delayed a day; and even then, I could only summarize the main points in the five minutes allowed me. Not a question or comment from the audience. It was just a lot of wasted effort on my part.

I could have made my presentation with scarcely any preparation at all for I knew the subject well since it was no more than my Ethiopian experiences. Even so, a fellow from World Bank, doubted that CSU would get the Mexican project, yet another Bank representative told me he agreed with the points I had made. He went on to say that he had read my dissertation during the time he was attending Stanford.

Such unease in speaking before a group carried over into the classroom where I was to teach engineering economy to Mechanical Engineering seniors. I spent *hours* preparing my lectures--point by point going over the material as though I were making a formal presentation to a learned body of listeners. True, I needed to read the Grant and Ireson text on Engineering Economy, since it had been years since I took the course at Stanford. Since then it had gone through several revisions. In preparing the lectures, another fear cropped into my head—that of running out of material and that some of my brighter students would ask questions I couldn't answer. I needn't have worried. Instead of not having enough material I had *too much* material, which caused me to rush my lectures and to carry over material from one lecture to the next. And, while I had plenty of bright students

talked of various possibilities from time to time. Sandy and Duff had been content to work within their relatively narrow fields of expertise: Sandy in manufacturing quality control and reliability engineering; Duff with mathematical optimization models applied to industry. They both taught engineering economy and capital budgeting when necessary. My arrival relieved them of this obligation.

unafraid to ask questions, none came even close to my depth of knowledge on the subject.

Sandy added to my nervousness when he said, in all innocense, that my lectures to the ME students were to be video taped for the hundred or so SURGE students who would be taking the course off-campus. SURGE was a brainchild of Lionel Baldwin, Dean of Engineering, for reaching students up and down the Front Range (extending from Pueblo to the south to Cheyenne to the north) who were working on a master's program while holding down a full-time job. Participants included those at such firms as IBM, Hewlett-Packard, Martin-Marietta, Colorado Iron and Steel at Pueblo, the military at Lowery air force base in Denver, and the air force base near Cheyenne. So, I not only had to contend with a modest-sized class of 18 but a blackboard and oral presentations that the camera could pick up.

The end result, during these early months, was that I spent practically all of my time on a single class that met for only 50-minute sessions twice a week. Like my dad used to ask, "Besides the two hours you spend in class each week, what else do you do"? Of course dealing with some 120 students can be a pretty heavy work load for a single class. I assigned problems for each lecture which, along with two mid-terms and a final, had to be graded. And I had to meet with each of the off-campus students at their work site twice during the quarter. I had two graders to handle the homework, but I couldn't sluff off the off-campus meetings or grading the tests I gave. I taught the same course in the spring and found the going somewhat easier.

The next shock hit me while sitting in on the weekly Mechanical Engineering seminars. Most of the topics were so far over my head, I scarcely knew what they were talking about. Topics involving sophisticated math or those related to heat transfer, aerospace, or fracture mechanics. While I thought I was reasonably good in math, my experiences at Stanford with probability theory, linear algebra, operations research, and a mathematical approach to macro economics made me realize that, while comfortable through calculus, I was *not* mathematically inclined. Yet, here I was surrounded by faculty whose higher math was their forte. Eventually, as work piled up and I became pressed for time, I simply quit going to these seminars, even though all department members and grad students were expected to be there. Attending was a waste of my time.

Even with the inefficient way I taught, I had time to pursue other activities expected of a university professor. I began this effort by trying to reach Maurice (Maury) Albertson. Before leaving Addis, Joe Stepanik suggested I look up Maury once I arrived on-campus. Joe said, Maury, a civil engineer, was widely known for his international work, especially that related to water resource engineering. When I tried reaching Maury, I was told he was out of the country—not an uncommon event I was soon to learn. Instead, I was introduced to Max Becker, his right hand man. Max had spent years with USAID, and Point Four before that, ending up in Honduras just before joining CSU. He and his wife, a gracious couple, were to invite Vicky and me into their home where they introduced us to others with international experience and interest. One of Max's suggestions was that I concentrate my initial efforts on teaching. One way was to attend the teaching sessions held weekly in the evenings for incoming faculty. This I did.

Eventually, Maury returned and I got to meet this tall, handsome, lively person with a winning smile, some ten years older than I. He welcomed me. And before long I was attending meetings chaired by him on a variety of topics, including teaching opportunities at the University of Peshawar in Pakistan and the Asian Institute of Technology in Thailand; he was also promoting an economic development handbook for engineers. I was soon to learn that ideas on how to promote CSU's international interests figuratively gushed from his mind. Before long, he had gotten both Vicky and me involved with the International House, a place he had set up where foreign graduate students could live. During the first summer, Vicky was to been in charge of the House's weekly barbecue nights. In this way we got to know both faculty with international interests and some of the foreign graduate students.

What brought me up short in still another way, was the time I spent with the graduate students. As a committee member, I was expected to counsel them, sit in on their admission to candidacy, read their master's theses or doctoral dissertations, attend the defense of theses or dissertations, and provide any follow-up help in completing their requirements. Mohamed Chaudry, a Pakistani, was one of the doctoral candidates whose dissertation concerned elements of economics in water resources planning. Chaudry was an engineer who had taken a few graduate courses in economics. So, when dealing with this topic in his dissertation, he addressed several economic issues but not to my satisfaction. During one of his committee's meetings, I said as much; and Maury smiled and said, "Bill, why don't

you get together with Mohamed and help get him straight on the points you raised." Which I did and without objection from Mohamed. In fact, I spent hours upon hours working with him—as much as if I were his principal advisor. What I didn't know at the time (I didn't ask and no one told me) was that the bulk of so-called "points" in working with graduate students accrues to the principle advisor. Serving on graduate committees (much as undergraduate advising and for teaching for that matter) is expected, but does little in gaining tenure or promotion—both critical to an academic career. Nor did the two and a half hour night sessions I taught engineering students in preparing for their Engineering-in-training and Professional Engineering exams count for much. Doing so, made me better known as a qualified engineer, but did little to gain me tenure.

One of the ways a university learns about its new faculty is through seminars. Thus, Millsaps urged me to give two as soon as I had settled in, which I did during the next two months. I gave the first of these to the ME Department in which I described, as learnedly as I could, my work in benefit-cost analysis. I was pleasantly surprised by the questions from several of the faculty. The other seminar was about my experiences in Ethiopia. Memorable about this one was the reaction I got from an Eritrean, who was among the thirty or so listeners. In providing background information about the country I said that James Bruce had discovered the Blue Nile, whose headwaters originate in central Ethiopia's Lake Tana. (My reference was Alan Moorehead's book, *The Blue Nile*.) The Eritrean shot up his hand saying, "Bruce did not discover the Blue Nile. We Ethiopians knew it was there all along" But of course! That lesson taught me to be more careful the way I put things. (I recall Colin, my colleague in Addis saying he was a direct descendent of James Bruce.) Later, I was to have this Eritrean in one of my courses where he displayed his Marxist leanings. So, he must have been waiting for a chance to shame me and others of my persuasion. Our State Department had been making it possible for students such as this one to come to the States for graduate study. Accepting such opportunities did not necessarily mean they admired us, our government, or our country.

Two others among the listeners were Ron Tinnermeier and Huntly Biggs from the Ag Economics Department. They came up to me afterwards to express their interest in what I had said. Soon thereafter, Tinnermeier asked me to lecture to his class on peasant agriculture. That led, much later, to another contact within the Department, this one from Don Sorenson, extension specialist. He asked if I would take a consulting assignment in Meeker, Colorado, which he was too busy to

do. The assignment had to do with the future of oil shale in this small community west of Denver, and not with agriculture, So, I am not sure why he asked me. Still, I accepted. Vicky and I drove to Meeker where, during the next three days, I interviewed dozens of people, reminiscent of my early work at SRI. What surprised me more than anything else was the amount of swearing in casual conversation. (Aside, from the pile-driver crews in Venezuela or perhaps in boot camp, theirs was the most profane language I had ever heard.) Most were exuberant over the impact oil shale development would have on their local economy. In fact, the prices of residential lots and housing had already shot up. But, I found their enthusiasm unjustified and said as much in my report. Thirty-five years later, they're still talking about the potential of oil shale. Finally, upon this writing the shale oil finally has finally taken.

Before this first seminar of mine--a short four weeks into the school year--Lionel Baldwin, our no-nonsense Dean of Engineering called me into his office. Once there, he tells me that the U.S. Department of Transportation has money for a study of transportation in the Colorado Rockies. He wanted me to write a proposal on CSU's behalf involving collaboration with the Univ of Denver and the Colorado School of Mines. In no uncertain terms he wanted CSU to take the lead, which was the reason he put me in charge. The next thing I know Baldwin arranges for a meeting with the U.S. Forestry and Range Experiment Station just south of the campus. He, Darrel Simons, associate dean of research, and I meet with the Station's director to see if he can tell us what is behind the Federal Government's interest in this study. For one thing we learn that Forestry is interested because of the impact transportation has on the preservation and utilization of the vast forest lands of Colorado. Tentatively, the three decide that the thrust of proposal should focus on the major freeways and the roads feeding into them. Because economic activity influences highway traffic, the study we would be proposing should take into account industrial, commercial, and recreational activities. And because of the Government's responsibilities for the country's natural resources, this factor needs to be considered. We're talking about a wide-ranging, multi-disciplinary study. By now, I suspect that Baldwin knows about my dissertation and its similar emphasis. By the time our meeting ends, I'm beginning to feel dizzy what with the responsibility, the newness of it all, and my association with these upper echelon individuals. As we departed, Baldwin said that he had already talked with the deans of the University of Denver and the Colorado School of Mines about our collaboration and that I was to be the team leader in putting the proposal together.

Over the next several months I contacted my counterparts at these two institutions. We held several meetings, sometimes in Denver, sometimes in Boulder, and sometimes at CSU. My dealings with Turner, my counterpart at Mines was easy enough. He was about my age and seemed to defer to my expertise for the type of study we would be proposing. Shirley Johnson, who was perhaps ten years my senior and Director of the Denver Research Institute, was another story. He subtly challenged my authority with the intent, I think, of wresting the project's leadership away from me.

To make a gut-wrenching story short, over the next several months the three of wrote the proposal, submitted it to the Department of Transportation in Washington, and waited. Eventually, the reviews came back. Although we were informed that our proposal was well-received we didn't make the cut. But then we did. Finally, Washington delayed action for so long that I never did find out what happened to our proposal. It was during this period that I was working all the time: seven days a week, often rising at 5:00 and staying at the office past midnight just trying to do the best job I could. I continually felt dragged out and overwhelmed by all I had to do. I had teaching responsibilities, I was working with graduate students, I had given two seminars, and I was establishing contacts with newly acquainted colleagues. At one point I wrote in my notes "I'm disgusted with the whole affair. Too much work and worry. I've had it. with the whole thing." Yet I soldiered on. It was during one of my meetings with Johnson and Turner that it was suggested that I give the leadership to DRI. Perhaps I had said I felt overwhelmed, or they could sense it. In any case, I gladly accepted. When I told Baldwin what I had done, he grew red in the face and told me what a big mistake I had made. I hadn't realized how much rested on being a lead institution, rather than a contributor-what it meant to CSU's stature, at least in Baldwin's eyes. I doubt I ever regained his confidence.

The Mexican proposal was my next failure, although I had a chance at recovery had I chosen to take it. In February, after things had begun to settle down on the Transportation proposal, Ev Richardson called to say Phillip Kirpich of the World Bank told him that the Mexicans were ready for our visit. Kirpich was one of the Bank's foremost water resources specialists. Earlier, the Bank had decided against CSU fielding a team in Mexico. Instead, the Bank was only interested in me as an advisor to the Mexican government's unit in charge of water resources planning. Working, not as a member of a CSU team, but as a single individual gave me something to think about. Would I be in the same position as I had been

in Ethiopia? Would I have a position within the University at the end of my tour? By now, the family had begun to settle into life in Fort Collins so how would they feel about being uprooted again? Even though these early months at CSU had been stressful, I was beginning to like the idea of living in the States again. Even so, I decided to explore this opportunity more closely. I called one of my contacts at the Bank and learned that Bob Brown had put in a good word for me. With that support I next talked with several at CSU about the wisdom of spending a year or two in Mexico. Simons, Richardson, and Smith² were for it; Baldwin was not. He thought the assignment had little academic content and, thus, would not yield refereed journal articles. I was pretty sure that Simons and Richardson were seeking ways to expand CSU's capabilities in the development field, especially as it related to water resources; Baldwin didn't have such interests; and I didn't know the motive behind Smith's support. After weighing the pros and cons, I decided to go to Mexico.

The project in Mexico concerned water resources planning for 10,000 square miles of highland with Mexico City at its center. The area was the heart of both the country's industrial and irrigated agricultural activities. Water for these important activities needed to be integrated into the large and growing potable water needs of millions of people. Beyond water supply, issues of waste water and sewerage disposal, and water logging needed to be taken into account in this area with insufficient natural drainage.

² By now, a rebellion had taken place within the ME Department whereby Millsaps was thrown out as department head and Fred Smith took over on a provisional basis. I think this was the first time I had heard such a demotion being justified with the words, "Dr. Millsaps has decided to step down from his administrative duties so that he could devote more time for research and teaching. With Smith taking over, whatever obligation and justification Millsaps might have felt for my presence in the department *was gone*.

I rose early on March first to catch a 9:30 flight out of Denver. After a flight delay, a plane change, and a time change, I landed in Mexico City late in the afternoon. Kirpich met me at the airport and immediately took me to see Fernando Gonzalez. After a brief introduction, Kirpich departed leaving Gonzalez and me to get to know each other. Gonzalez had gotten his PhD at CSU, which should have accrued to my advantage, except it did not. Gonzalez's major professor was Warren Hall, a noted authority on water resources planning.³ I was soon to suspect that Gonzalez's expertise, *and interests*, were in optimization. I not only did not have such expertise, since my approach to project planning was broader and more generalized, I lacked the stature in water resources planning enjoyed by Hall. I soon found out that the reason the Mexicans favored CSU was the Gonzalez-Hall relationship.

The meeting went poorly. Almost from the start I felt Gonzalez's antagonism towards me. After emphasizing my international experience with its focus on developing countries that included some involvement with water resource projects, Gonzalez began toying with me. "What is a developing country? Why do you think Mexico fits that category? Aren't we more advanced than Ethiopia? When you use shadow prices for underemployed labor, who are these? Do you realize that I came from peasant farmer stock? Yet, look where I am?" Before long, we ceased talking about the project and my qualifications as team leader. I got to my feet, thanked him for his time, and departed. Less than thirty minutes had elapsed. Kirpich looked somewhat taken aback when I told him how the meeting had gone, that Gonzalez favored Hall for the job, and that there was no

Hall had made his reputation as the systems optimization guru for one of California's major water resource projects —the transfer of water from the north to the south as an important source of water for the greater Los Angeles area. I had heard about Hall, who was soon to join CSU's Civil Engineering Department. Those associated with water resources were thrilled by the prospect —Hall had written a text on water resources optimization, including what he called the surrogate-worth/tradeoff method. This abstract concept involved a means for placing a value on water when market values either are not available or do not incorporate broad social values. One of my lectures for Civil Engineering was to review and comment on Hall's book. While I recognized the sophistication of his approach, I was critical on points I thought overlooked some basic economic principles. Though I was cautious in my criticism, I knew I was treading on thin ice for Hall was a border-line genius, something I was to appreciate later through working with him on several occasions and from sitting in on graduate committees chaired by him.

way I could compete with Hall's expertise in water resources systems. Kirpich countered by saying he knew about Gonzalez's preference for Hall, but that Hall would only come to Mexico intermittently, and the Bank wanted someone in Mexico full time.

The next day, Kirpich took me to see other officials higher up in the government hierarchy. These interviews went better, though more innocuous, for I suspected that the project under question was just one of many activities of interest to them. I recall meeting with a Dr. Crunckshank, a tall swarthy individual, and thinking that was an odd name for a Mexican, not the Ochoas, Ortegas, or Lopezes one is accustomed to thinking suit the country. But, of course, this is ridiculous. Others settled in Mexico besides those from Spain. Yesterday's and today's meetings were all in English. Although I could have struggled in Spanish, the discussions were easier this way.

After these meetings, we had lunch on the tree-shaded patio of one of Kirpich's favorite restaurants. He told me he thought Gonzalez wasn't aware of my background and that he could persuade him to accept me. He then offered me a personal one-year contract with the Bank. I said no. I simply did not want to work in an environment where I wasn't wanted. Afterwards, still stunned by this turn of events, I rode the trolley out to some of the neighborhoods where I walked the streets, visited a supermarket or two, went down to the Zócalo to view the cathedral and open space there, and ended up at the adjoining modern shopping center with it bright lights, theaters, and throngs of people. All this in my attempt to visualize what it would have been like to live in this huge, smog-engulfed metropolis.

The following morning, Kirpich rang me just after 7:00 to say that he was leaving, but would continue trying to convince Gonzalez to accept my appointment. With time on my hands and in a daze over the sudden change in events, I wandered about the City. I visited Chapultepec Castle, an archeological museum, and ended up that evening going to a fancy Greek restaurant on the Paseo de la Reforma. Following that, I went to a nearby theater to see the God Father. The violence of the film helped put into perspective the rejection I was feeling. The next day, another failure under my belt, I returned home to break the news to Vicky. She was not disappointed. Nor was there much reaction when I told those at CSU. Life moves on.

My choice to stay on-campus, rather than risk being gone for a year or more rested on my recent realization that tenure-track positions at major universities were not easily obtained. While at Stanford I had turned down a forgivable loan offered by the Ford Foundation to those interested in higher education once they graduated. The offer made it sound as though teaching opportunities were there for the asking. But now, I realized they are not. As a guess, I would say that no more than one in ten PhDs are able to land a position comparable to the one I had; even then the possibility of gaining tenure was uncertain and making full professor even more uncertain. In short, I began to realize just how fortunate I was to have obtained this position at CSU.

Two weeks later, Simons called to say that the Mexicans were *very interested* in having me in Mexico. I told him that I had already decided to reject their offer, which he gracefully accepted. If nothing else, the Mexican's continued interest showed that my credentials in water resources planning were valid.

With the decision to stay in Fort Collins, Vicky and I began looking for a house of our own. We ended up building, instead of buying, because that way we could get what we wanted where we wanted it at the same price we would have to pay if we were to buy a house. In the end, we built on a lot within walking distance of the Fort Collins Country Club. During our search, we were surprised about how little mention had been made of this premier golf course, almost as if it did not exist. Once Vicky and I had chosen the lot and agreed on the construction plans, she worked with the contractor in selecting the kitchen appliances, flooring, colors and wall paper, as well as making periodic inspections and payments. This left me free for work.

Despite the failures, I had been making progress in establishing myself professorially. The entry point was the engineering economy course I taught. Engineering faculty had learned about this course, my use of the Grant & Ireson text, and its application to the benefit-cost analysis of water resource and other public works projects. Bob Haymen of Civil Engineering asked me to help him with the parts of his class that relied on the Grant and Ireson text. Both George Smith and Ed Schultz, two other CEs, asked me to help with the engineering economy course they were teaching to senior engineers. (For some reason, the Mechanical Engineering and Civil Engineering departments felt it important to teach their own students, even though the material was the same, and, in this case, so was the text!) Neil Grigg, another CE asked me to lecture on benefit-cost

analysis for his transportation class. I don't know if his interest came from the engineering-economy course I taught or if he knew about my dissertation's focus on roads. Earlier, Neil had asked me to have lunch with him and his consulting partner so as to learn more about my international experience. While I thought our meeting went well, there was no follow up. Neil was to become department head, be appointed as a state water judge, and serve on the city counsel. John Labadie, another CE who consulted and taught courses on the optimization of large-scale water resources systems, asked me to lecture on benefit-cost procedures in his CE 745 class. (Note: the 500, 600, and 700 series are graduate-level courses; the higher the number, the more advanced–supposedly.) Clearly, my expertise in benefit-cost analysis as applied to public works was finding a need within the Civil Engineering Department.

While my Iowa State and Stanford degrees suggested that the CE Department was the logical place for me to be, and the above contacts would bear this out, I was told that a faculty position for me was not available there. At Sandy's request, the Mechanical Engineering Department had simply made room for me.

Later, I was to find out that these efforts on my part "cut little ice" within the Mechanical Engineering Department. In fact, some ME's disdained the CE's for the way they taught similar courses and had more of an affinity for the Electrical Engineering faculty. The fact that my PhD was in civil engineering didn't help. While looking down their nose at the CE's, the ME's seemed merely to tolerate the Industrial Engineering section as not being at the heart of mechanical engineering. Although feeling this way about our section and paying little attention to Duff, they liked Sandy as a person and respected his opinions. Failing adequately to appreciate Duff was a mistake on their part, for he was brilliant in his knowledge of optimization and systems engineering.

Beyond working with the Civil Engineering and Ag Economics faculty, I began collaborating with those far senior to me in position and prestige. Henry Caulfield, whom I met at our Country Club, was a full professor in the Political Science Department. To my surprise, he asked me to lecture to one of his classes about my international experiences. He had held a key position in the Department of Interior and had been on the staff of Resources for the Future. Recall, that RFF had been one of Washington's prestigious think tanks I had learned about while at Stanford. I met Vic Koelzer through my parents. Vic joined the Civil Engineering Department as a fully tenured professor the same time I came to CSU.

Dad and Mom were friends of Koelzer's sister who lived in the same trailer park in California as they did. We had met her there on our way to Fort Collins. He was one of the authors of the "red book," the Department of Interior's guidelines for evaluating federal projects, and had been a vice president of .Harza, a large engineering firm in Chicago. He asked me to lecture in several of his classes. Again the topic concerned benefit-cost analysis and focused on water resources planning. Most likely because of this association Warren Hall asked me to join him, Simons, and Koelzer in giving a two-day seminar in Denver as part of the American Society of Civil Engineers' educational program. As above, my contribution was in benefit-cost analysis of public works.

Another boost came when George Löf arranged with Fred Smith for Sandy, Bill Duff, and me to work on an amply funded study of the potential for converting solar energy to electrical energy. Löf, who held joint appointments at CSU and Colorado University, was to receive a national award from President Johnson for his pioneering work in solar energy. All told, perhaps 15 researchers participated in this study, which went on for several years. My assignment provided "coverage" for about a quarter of my nine-month appointment.⁴ My work required cost estimates of alternative designs of solar collectors. Ideas for the designs and manufacture came from Harry Wilson, my collaborator from Westinghouse-Electric's headquarters in Pittsburgh. I passed my cost estimates for the various collector designs to Duff, who used them in his optimization models. These results were then fed into the larger study of overall efficiency and suitability of solar collectors for generating solar-based electrical energy. While work like this was outside my major interests, it did give me a chance to work with other faculty in a way that demonstrated my abilities in benefit-cost analysis. Little came from this lengthy and expensive study because the conversion of solar to electrical energy requires dependability. The latter can be provided by conventional, backup

³ CSU, like some state institutions cannot cover the full nine-month salaries of most of its faculty. This means that we must look for outside funds if we are to be fully paid during the academic year. Most of these funds come from contracts, which augment the relatively small amounts that come from grants and endowments. Occasionally, when one is "on the beach" so to speak, the department will step in and provide the needed funds to pay the faculty member his full salary. But this does not set well with department heads and deans and better not be relied upon often.

facilities. But this reduces any cost advantage solar might have. Storage in high-capacity batteries wasn't practicable then, not even now.

But the activity that brought me the most satisfaction, was a graduate-level course I designed based on my Stanford dissertation and my Ethiopian experiences. Called Project Planning for Developing Countries, this full-length, graduate course incorporated elements of engineering economy, development economics, planning, and finance. While I felt well-qualified to teach this course, Ken Nobe, Department Head of Ag Economics, bristled at the idea that *anyone* outside his or the other economics department would teach any sort of economics course. Smith set up a meeting with Nope where I was able to establish my credentials. Nobe relaxed his objections by demanding that the course be team taught. The resulting course was basically the one I had in mind; but I set aside portions to be taught by Huntley Biggs, my counterpart from the Agricultural Economics Dept.

By mid-April I had begun preparing for the course: reading, jotting down ideas, locating resource material, and outlining some of the early chapters. I planned to rely on many of the articles and authors I had used in writing my dissertation. I would draw on my years of experience in Ethiopia to flesh out some of the concepts. And I hoped to acquire some of the teaching materials of the World Bank's Economic Development Institute in Washington, D.C. EDI taught a series of courses on project planning for the LDCs in which it brought in middle-level government employees for a month or more of intensive instructions. EDI's director was J. Price Gittinger, whose book, Economic Analysis of Agricultural Projects parallel much of what I planned on teaching. I had met Gittinger on an earlier visit to the Bank. At that time, we found much of mutual interest. And, knowing that I would be teaching at CSU, he suggested I sit in on one of EDI's training sessions. As I left, he said he would be happy to provide me with teaching material whenever I needed it. So, I was reasonable confident that I could access much of EDI's training material should I ask for it. Of particular interest to me were the case studies EDI had developed. These studies, in disguised form to maintain confidentiality, came from projects the Bank had considered funding. I intended to use one of the case studies during my course's final week. The intent was to have my students apply the concepts and analytical technics I had presented throughout the course to a "real live" project.

We offered the course on a provisional basis during the summer quarter. About twenty master's and doctoral candidates had signed up. Not a bad number for an experimental, summer course being taught for the first time. Foreign

students made up half of the class. As a rule the students were seasoned and serious. Some of the foreign students had held down senior government positions in their country; some of the American students had been in the Peace Corps; and even the younger, less-experienced ones had a strong motivation for taking the course. It was an ideal group. The two Ethiopians in the group were Ato Lemma and Ato Habte Selassie. Upon graduation Lemma joined the Bechtel Corporation, a prestigious engineering-consulting firm in San Francisco; and Habte, already showing signs of graying hair, joined the United Nations in New York City. Sam Johnson, a bright PhD candidate in Economics attended a couple of lectures then dropped out, which disappointed me. I concluded that the course was not theoretically challenging enough. Later, I felt better when Sam asked me to serve on his PhD committee. Pixie Ross, a master's candidate in economics, was heads and shoulders above the other students. For the most part, she sat at the back of the class, listened carefully, and only occasionally asked questions.

Two others: Janikaram of India and one of Maury's master's candidates and Taghi of Iran were two of my "problem children." Both used up hours of my of my office time: Ram telling me what his plans were, put producing little. and Taghi trying to weasel higher grades on his homework and tests through flattery. In studying economic development I had learned that meritocracy, such as we have in the United States, depends on one's performance, whereas in traditional societies success usually depends on whom one knows. By spending hours in my office, Taghi was trying to establish person-to-person bond. "It didn't work." But he probably got more out of me than he deserved. Another foreign student who was to take the course a year later was Ato Zewdie, the very individual whom I had fussed with in Ethiopia. He had come to CSU on a doctoral scholarship in water resources planning. When he came to my office we had a fine time remembering "old times" in Addis. He asked me to be on his PhD committee and I gladly accepted.

Despite some of my jumbled lectures and limited blackboard skills, the course came off well—if one can believe the course evaluation these students gave me or the number of students who signed up the following year. We had fine, lively discussions. I often deferred to the experiences of those in class when they disagreed with a point I was making, asking what they would do, or what was wrong with my position. I got around political differences by focusing on technical aspects and quoting authors of note. Thus, we had good debates, which at times I had to cut short when they began to infringe on the time I needed for

other subjects. Pixie, who had lived for many years overseas where her father was, an AID employee, knew the development field and what I was trying to teach. She became one of my staunchest supporters. Being the confident leader she was, she promoted my course among the foreign students within the Ag Economic Department because, as she said, I taught the practical side of economic development. She asked me to serve on her master's committee, which I was happy to do. After successfully defending her thesis, Nobe told those of us on her committee that she was the smartest master's student he has had in a long time.

Meanwhile Smith would drop by my office from time to time to "see how I was doing." He asked what progress I had made in getting something published in the professional journals. The "Publish or Perish" challenge. When I told him I had some ideas, but my work load hadn't allowed it, he looked down, then up, and continued. The "ideal model," he said, was to come up with some research idea, obtain a research grant from a donor such as the National Sciences Foundation, use these funds to cover part of my salary and that of a couple of graduate students, do the research, collaborate with these students in writing up the results, then getting our papers published as refereed articles in professional journals. That model departed so far from what I was capable of doing at this early stage of my academic career that I felt helpless. I never faulted Smith for thinking this way, for undoubtedly this was his path to academic success. But it wasn't mine; nor did it necessarily apply to others, who were more practically inclined. I kept thinking about the orientation we received as newly appointed faculty: that the University's goals are teaching, research, and service. I was teaching, and the applied work in solar and eventually in the international field was a form of service. As for research, I might fall short there, except that much of what I had done abroad and at SRI had been applied research.

All of this came to a head during my second departmental review in February of my second year. The previous annual review had gone well. Then, Bob Haberstroh (a friend), Sandy (a bigger friend), Harry Rennat (a kindly fellow), and Fred Smith as newly appointed department head made up the committee. This time, the committee was less friendly. There was Mike Histand, Harry Edwards, and Fred–all three hard-nosed mechanical engineers with sound academic accomplishments. During the hour-long session I encountered serious faces, diverted looks, and probing questions, one of which was how much association I had with Albertson. When I said I had helped several of his graduate students and had contributed to some of his schemes, they asked how much "coverage" he had

given me. When I said none, I saw a quick and subtle exchange of glances. Were they smirks? I surmised that they did not hold Albertson in high regard. Had he been playing me for the fool?

Three weeks later, mid-afternoon of March 15, 1974, Smith came to my office, closed the door, and gave me the disappointing news. He said Albertson wouldn't provide any "coverage" for me, that I was spending too much time with students, was not aggressive in promoting research or bringing in projects, and had not published anything in the professionally reviewed journals. Thought not mentioned, the value of my projects planning course seemed to merit little. "Not having developed a program was fatal for an associate professor at my salary level," he said. He promised me a quarter of special studies next fall to allow me time to find suitable work *somewhere else*, but not at CSU. If funds were available he'd cover the winter and spring quarters. That was it. I was fired!

The rest of the afternoon was lost. I left my office and wandered around the open, grassed areas to the west. I was in shock again. While I might have expected something like this to happen, given Smith's earlier talks with me and the chill I received during my recent annual review, I had not expected to be fired. I kept all this to myself searching for some idea as to what I should do next. For the next two weeks I carried on the best I could, as though nothing had happened. I taught class, graded papers, met with graduate students, worked on solar energy, even took the family skiing at Steamboat Springs during spring break. Finally, I told Vicky about the review. To my relief, she took it well.

I spent the next eight months in a blur of activity and uncertainty. Early on, I had gone to Rhode, a CSU vice president to find out whether Smith could dismiss me after the fall quarter. He said he'd have to check with Chuck Neidt, the Provost. He soon came back to me saying that my contract was good through spring of next year. That was a relief. At least I had time to figure out what to do next. I then went to Albertson to see if he had project funds to cover part of my salary and got a fish-eyed "no." I tried Neill Grigg, who said he had no funds available from his current activities. But he did say he could use my help on a water quality project in Jamaica, should it materialize. Then things began to look better. Skook Karaki, CSU's leader for the solar energy project, said he would continue funding Duff and me. And, Smith said he would fund my projects planning course during the summer. But even with this financial support I doubted this was enough to change Smith's mind about letting me go.

On Memorial Day, six weeks after informing me of my dismissal, Smith came by my office to ask what my plans were for next year. I told him, "I plan on staying" whereupon he got up without comment and left. The next week, I checked with Darrel Simons, who said he had no doubt that I would be able to gain tenure, otherwise, he would not have agreed for CSU to hire me. I checked with Ev Richardson, who with Sandy had been responsible for bringing me to CSU. He had no project money at the time, but contacted Albertson as the one on whom he relied for things international. The meeting that the two arranged also included Don Taylor, a PhD student of Albertson's with international interest and experience. Ev suggested that Don and I collaborate in writing two proposals that he would submit to the National Science Foundation on our behalf. I was to write about project planning in LDCs and Don would write on overhead charges. Richardson, having

tried with limited success for years to justify Casuswash's⁵ overhead rates to USAID was looking for ammunition.

A few weeks later, Richardson approved the NSF proposal I had written. Then, as the deadline for the proposals drew near, Richardson called to say that he had received little from Taylor. "Would I also write the one on overhead rates?" Within a few days, I had that one nearly ready for his review. But to meet the deadline, I had worked all night at the office. Finishing up at 6:00 a.m., I went home, napped for an hour, showered, and ate breakfast. Then back to the office by 8:00, lectured, phoned Wilson, finalized my draft of the proposal, worked on my resume that would accompany it, and got Vicky to come to the office at 10:30 p.m. to type the final copy. We finished up at 3:00 a.m. I went to bed as soon as we got home and slept from 4:00 to 7:00. That gave me four hours of sleep in the past 48 hours! I got the proposal to Contracts and Grants by 8:00, worked till 3:00 p.m. then went home and crashed. I was able to wake up in time to watch Mike play baseball that evening. I was running on adrenalin! And I pictured university life

⁵ CSU, Utah State University, and the University of Arizona had formed a consortium to promote their mutual interests in water and range management projects funded mostly by USAID. The latter had provided seed money to the three universities to help set up the consortium, feeling that these three leaders in their fields would function better together than in competition. The strange name somehow captured the consortium's target interests. But what the acronym stands for escapes me. Later, it was learned that the word comes out as obscene in Farsi, Iran being the place were several of the consortium's early projects had been.

as being largely stress free! Nothing came of these two proposals, but at least I had demonstrated my ability to work and write under pressure.

After my ME course ended in May, I wrested funds from Smith and Karaki for a trip back East. My idea was to use a meeting with Westinghouse in Pittsburgh to allow me to visit the East coast. Once there, I contacted funding institutions such as NSF, the World Bank, USAID, the Social Sciences Research Council, the Brookings Institution, the Highway Research Board, and the US Department of Agriculture where my experience as deputy team leader of the SRI's agricultural study in Ethiopia might have some appeal. I was casting a wide net, but nothing came of this trip. I did not have a viable concept, the contacts, or the scientific stature to gain more than polite interviews with the likes of the Ford Foundation, NSF, or Brookings; for AID and the World Bank I was good enough. but not these others. I was just going through the motions. Nor did anything come of my stopover in Kansas City to talk with Black & Veitch about further funding in solar collector designs. After returning home, I made one last try to promote a program in project planning for LDCs through the University of Arizona and Utah State University-the other two Casuswash institutions. I offered the course I had been teaching, my years in Ethiopia, and my doctoral dissertation as evidence of my expertise. Mike Bradley of University of Arizona and Jim Zwerneman of New Mexico State showed interest. Again, nothing came of this effort

For the rest of the summer quarter I taught my projects course, worked on the solar energy study, and submitted two articles. One of the articles, in collaboration with Harry Wilson was on the cost of solar collectors. The other was a light-weight effort to show I was at least trying. It was *A course on project analysis in the LDCs*, submitted to, and accepted by, the International Engineering Education Newsletter. By now I had developed good working relationships with Duff and Wilson; and Karaki told me he appreciated my punctuality in getting my periodic reports to him. Richardson encouraged me further when he said that my future would be good should Congress approve AID's program to give preference to Land Grant institutions in awarding its agricultural projects overseas. Approval for these so-called 211(d) contracts was still pending. I would just have to wait it out.

Meanwhile, fall quarter began as though Smith had never told me to leave. He assigned two courses to me. The one on engineering economy came far easier. After all, this was the third time I taught it. The one for ME freshman caused me

concern because it meant teaching computer programming. I had been away from computers since finishing my PhD at Stanford eight years earlier. That might not have been bad had it not been that the language was Fortran. And I had no experience with Fortran—a much improved language than the Balgol and Algol I had learned at Stanford. But with a certain *savoir-faire* about my learning abilities, I attended a Fortran course taught by Computer Science faculty in the morning then that afternoon taught what I had just learned to my students. And it came off! I was beginning to learn how to teach, although, I still had trouble preparing tests, I took too long grading papers, as were the lectures I prepared.

Then in late October a veritable deus ex machina happened. Richardson called me to say that USA/Washington was looking for a systems irrigation specialist to go to Peru for seven weeks. He wondered if I were interested. first I declined, thinking I hadn't the required expertise; besides, I was teaching two courses. Earlier, Casuswash had sent an experienced systems guy there, but his work was not satisfactory to either the AID mission or the Peruvians. They wanted to try again. I was hesitant because the job description he sent to me mentioned optimization procedures. Although I had studied operations research, which included linear programming, I lacked the practical experience. He suggested I call Andy Cory, a CSU faculty member from the Ag Engineering Department who was on sabbatical working for AID in Washington. Andy assured me that I needn't worry over my qualifications. What was needed was someone with my type of practical experience. So, I thought it over, talked with Vicky who thought it was a good idea, even though it would mean missing Thanksgiving, birthdays, and Christmas. I then asked Smith what he thought and, if I were to go, who would cover for my classes. He said this would not be a problem. I learned then and there that funding trumps all. Getting the all-clear, I called AID/Washington again saying I was available. Within three weeks I would be on a plane headed for Lima.

These three weeks passed quickly. My time for departure drew near. On November 19, I spent much of the day talking with students about their homework and who would fill in for me. I went home for a quick evening meal then spent the rest of the night writing letters and instructions for those who would cover for me then assembed the material I wanted to take with me on the trip. By the time I finished, morning had arrived. Another "all nighter." I got a haircut on the way home, ate breakfast, and went to bed at 11:00 a.m. After sleeping for several hours, I got up and attended to a few things around the house, which took me till

11:00 p.m. Up at 6:00 a.m. on the 21st I drove to Denver for my 9:00 o'clock flight to Lima.

As I took the cutoff to the airport just north of Denver, I suddenly grew nostalgic. Up until then, my mind had been a mixture of excitement over a new venture and mild preoccupation with getting ready for the trip. Now, it came home to me that I was to be gone seven weeks: over Thanksgiving, Christmas, New Years, Tim's, Becky's, and Vicky's birthdays, and our twenty-second anniversary. Since our marriage Vicky and I had been separated for so long only once before—the two months when I returned to Menlo Park in early 1969 to help write SRI's final report. A melancholy time awaited me. Later, in Lima, I met James Seagraves, an agricultural economist from North Carolina State University, who had been coming to Peru for years. He was on a six-months assignment whereby he was to be separated from his wife for most of the time. At the time, I marveled at his fortitude. But I need not have, for his marriage was on the rocks. So the separation suited him well. This was not the case with Vicky and me.

After brief stops in Dallas, Miami, and Panama City, I arrived in Lima at midnight. An AID driver picked me up at the airport and drove me to the Gran Hotel de Bolívar—a charming colonial-type hotel across from the Plaza de San Martín in the historic part of Lima. Having arrived at my destination, I first relaxed then grew nervous over what was ahead of me. Eventually I drifted off to a dreamless sleep. But I needn't have worried, for all would turn out well. I was about to turn the corner!

The next morning I stayed in bed as long as I dared, eventually called the AID office and was put in touch with Rollo Erich, my contact there. To my surprise, bless his soul, he told me to go back to bed, that I needed the rest after the all-night flight. "Just show up in time for lunch." and gave me directions on how to find the office in downtown Lima. The AID office was in an airy, well-appointed four-story building in a clean, but unpretentious part of town.

During a modest lunch at a small, street-side café, I learned that Rollo was an economic professor with the University of Wyoming. He was on sabbatical leave working as the Acting Chief Agricultural Officer and manager of my project. He was about my age, fit, good-looking, and friendly. I thought we would get along nicely. After lunch, he drove several blocks to the center of downtown Lima to meet my Peruvian contact, Axel Dourojeanni, *Sub-director de Aguas* in the *Ministerio de Agricultura*. The building we entered was located in what looked like the financial district with rows of twelve-story gray buildings facing dark and dusty streets.

We took a rickety elevator up eight stories and entered a large, bullpen room with about twelve men and women bent over drawing boards, working calculators, or writing at their desks. Walking past them we entered a small, nondescript office off to one side. There Rollo introduced me to a handsome young man of medium height (most Peruvians are not tall) perhaps 15 years my junior with a neatly trimmed beard. Axel Dourojeanni was *sub-director* of a unit called *Manejo de Cuencas* (River Basin Management). We began in Spanish, but soon turned to English, when Rollo's limited ability in Spanish proved inferior to Axel's English. Mine too for that matter. Axel welcomed me warmly, saying he was expecting me, and quickly ordered coffee before getting down to business. As Rollo and Axel attended to other business, I wondered about Axel's family name. Dourojeanni didn't sound Spanish. His father, now divorced from Axel's Peruvian mother, was of Greek origin and French citizenship. Those working with Axel chided him in a friendly way about his foreign accent, which was understandable because Axel spent the first seven years of his life in France. By the time our

coffee arrived, the Director of *Aguas*, Axel's immediate supervisor, walked into the room with a beaming smile saying he was glad to see Rollo and me. This was Julio Lostao. He was short and nicely built suggesting some mixture of Indian blood. He was smartly dressed in a crisp shirt, expensive tie and suit, and highly polished shoes. He looked like a dandy. But he wasn't. At this point we switched back into Spanish for Julio's benefit.

Julio soon confirmed that I would be working with them here, and that they would support me in any way they could. We then walked around the large room where Axel introduced me to Lizarraga, his chief *lieutenant* who looked to be about forty, chubby, with a touch of Chinese blood, though I never heard this characteristic mentioned. In time I learned that many Chinese had immigrated to Peru over the years and had integrated themselves nicely into the society. In fact, one of the most popular places to eat in Lima were the *Chifas*—these Chinese restaurants not like those commonly found in the States, but up-scale, elaborate places catering to the well-to-do. When a higher up at the DGA wanted to celebrate, he would often choose one of the many *Chifas* nearby. After a few words in Spanish we moved on to the rest of the group: all engineers, including two women, who looked to be in their late twenties. These too welcomed Rollo and me, but quietly and respectfully.

Rollo and I prepared to leave but were surprised when Julio pressed the elevator button for the twelfth floor. Julio said he wanted me to meet his immediate boss, Dr. Arturo Cornejo. Now, the relaxed atmosphere of our meeting suddenly changed to one of dignified reserve. I was soon to learn that Cornejo was a senior member of the Ministry's top hierarchy and Dean of Agricultural Engineering at *La Molina*, the country's premier agricultural college located on the outskirts of Lima. Dr. Cornejo was a large, well proportioned man in his mid-fifties. It was clear that Julio and Axel felt awed simply by being in the same room with him. Even so, Dr. Cornejo soon dispensed with formalities, ordered more coffee, probed Rollo about the details of my assignment, promising the full support of the Ministry. After some twenty minutes, Julio signaled it was time to leave and we excused ourselves.

As Rollo and I left the meeting, I marveled at how friendly and professional the meetings had gone and I complimented him for having laid the groundwork for my assignment here. I

assumed that, working with the Peruvian government, the AID Mission had agreed on a development need and had identified the relevant institution and persons within that organization. I was encouraged by what I had seen this first day on the job. My doubts and worries about my assignment diminished.

To round out the day, Rollo drove me to the Pension Cortés to see if they could provide me with room and board. They did and I planned on moving in on the morrow. Then on to Rollo's home where he introduced me to his wife, Ginny, and their two children. I stayed for dinner, at their insistence. But I really *needed* to get back to the hotel and get some sleep. The early departure from Ft Collins, added to the limited sleep prior to my departure, the full day of travel capped off by the over-night flight left me aching to sleep. At least now, I could relax having met and been treated so graciously by the key players in my assignment.

The next day while passing through the hotel lobby I bumped into Philip Kirpich, the World Bank fellow who traveled with me to Mexico City nearly two years earlier. We talked about development in Peru and my assignment, but not about Mexico. Small world. But not really so small given our common interests. Then, I departed for another meeting with Rollo at AID headquarters. When I arrived a secretary led me right into Rollo's office, even though he was in a middle of a heated discussion with Smith, the Program Officer. (In the line of the responsibility, the Program Officer ranks third, after the Director and Deputy Director.) Acknowledging my presence with brief nods, they again faced each other, continued the argument, and eventually began shouting. Soon, Smith turned on his heals and left. I was amazed that I had been witness to such a tirade, but Rollo soon cooled off, offered no explanation, and began explaining my assignment. In collaboration with Peru's national planning group (Instituto Nacional de Planificación) the AID Mission had agreed to loan as opposed to *grant* the Government of Peru money to develop small-scale irrigation in the High Sierra. Working with the sub-unit in charge of small-scale irrigation I was to prepare a report that would serve as the basis for the Project Identification Document (PID) that AID needs in authorizing such funding. Assuming the Government of Peru and AID/Wash approved this

document, I would then help the Mission write the Project Paper (PP) that would be the basis for the agreement. Falling short of just "giving" money to the Peruvians as with a grant, the terms of the loan are concessionary in that the interest rate and repayment schedule are softer than in the private sector.

The target beneficiaries of the effort were the "poorest of the poor." The AID Mission focused on this group in response to a US Congressional directive as well as to Peruvian politics. At the time the President, General Juan Velasco Alvarado, was a socialist who felt the need to provide some degree of stability among the Andean poor. Helping them increase agricultural production through improved supplies of irrigation water, along with better technology and credit, was an important way for doing so. Also, Lima and other important coastal cities were being crowded by those migrating from the highlands. This migration created slums, raised unemployment, and stressed housing, water, and sanitation facilities. All these contributed to a potential time bomb if the influx could not be slowed. Improving living standards in the highlands was hoped to be a way for accomplishing this, as well as building popular support for those with leftist ideas. Later, in our discussions, many in Axel's group of engineers said they were from the highlands and said that they would have preferred staying in their home villages had conditions been better there. But how does one demonstrate the viability of improved irrigation if these farmers are poor simply because the land, soil, and climate are adverse? This was a challenge we got around by including a mix of farmers with varying physical and economic conditions.

Midway through the discussion, Rollo invited two others to join us: They were Wendy Stickel, AID's Loan Officer, and Janet Ballantyne, a consultant--both members of AID's Program Office. Wendy brought with her the AID/Washington manual on preparing the PID which I was to follow. This Document, which was to serve as my guidelines, listed the types of activities I was to consider, such as stated objectives, scope, inputs, outputs, and milestones. I said I would study these and get back to them. Knowing what to include in my report was helpful even though I already knew how I planned to carry out the economic analysis--but I kept

this thought to myself. In closing off our discussion, Wendy and Janet said they would work with me and help out as needed. To my relief, they told me *what* they hoped I would accomplish, not *how* I should do it. That left me with the needed flexibility to apply my expertise to whatever approach seemed best. Finally, by mid-afternoon my attention began to sag, even though we had taken time off for lunch. I said I thought I needed some time to go over these documents back in my room. All agreed and Rollo drove me to the *Pensión* where I *crashed* waking up just in time for dinner.

The *Pensión Cortés* was located down a side street a hundred meters or so from *La Avenida Arequipa* in *San Isidro*, a middle-class suburb. This attractive four-lane avenue with a divider of trees, shrubs, grass, and even a stretch of royal palms runs southeast-northwest between the center of downtown and *Miraflores*. The latter is a beautiful, touristy suburb with shops, fine restaurants, a theater, travel agencies, banks, and even sidewalk artists. The beach front lies a kilometer or more to the west. During the summer months (November to January) buses would be filled with bathers in their swimming attire. An advantage of staying at the *Pensión* was that it was adjacent to this exciting suburb. The downside was that during my first three assignments in Lima, I seldom had time to take advantage of this proximity.

The *Pensión* was a common, everyday two-story house on a narrow plot of land in a middle-class, tree-lined neighborhood with only a fringe of shrubbery and grass in front and a small grassed patio in back with shrubs, decorative trees, and surrounded by a twelve-foot fence. Five smallish guest rooms were on the second floor and two more along the back of the patio. Downstairs was an ample-sized living room, a dining room seating twelve, a kitchen, and living quarters for *Sr.* and *Sra. Cortés.* The *Pensión*'s guests tended to be from Central and South America. I liked this opportunity of learning more about Latin American culture and communicating in Spanish.

I remember a couple of consultants from Argentina with their guttural, Germanic sounds and the hard H-sound for the letter G, as in *Hente* instead of *Gente* (people). During one of my subsequent trips, a teenage girl was staying at the *Pensión*. The only other American who stayed

at the *Pensión* while I was there was *Carlita*, a sixteen-year-old high school student. She had been staying there for a few months attending school, while her father worked with a mining company in the Peruvian Andes. I never got the story about her mother. Having our evening meals together made it easy to get to know the other guests. One evening, *Carlita*, having learned that I was a university professor, asked if I would look over a term paper she was writing. Which I did. I learned that she was to graduate after a year and a half and planned on attending CSU. What a coincidence. A few years later, I bumped into her on campus, which was another coincidence, but no surprise. What intrigued me with her and her friends, who would sometimes visit on weekends, was the ease with which they moved between Spanish and English in mid-breadth.

On weekdays, which included Saturday, breakfasts tended to be a hurried and simple affair of powdered orange drink, a single fried egg, dry toast, and Sanka coffee. The custom among the Peruvians was to mix a teaspoon of coffee with sugar and a little water then stir the mixture until it reached a frothy caramel color. Somehow that changed the taste. Sunday breakfasts could be more elaborate with papaya or fresh pineapple, cold cereal, and an omelette; sometimes, even pancakes with syrup. After the first try, I gave up on the pancakes, which came thick, tough, and needing salt.

In contrast to our meager weekday breakfasts, our evening meals were a treat, which revealed the *Pensión*'s cook to be a fine epicurean. Especially to my liking were her servings of escalope Milanese (thinly sliced breaded veal), which the Argentines said was the best they had ever tasted. I also was fond of the *peje rey* (king fish). Contrary to its name, the latter is not a large fish. Instead, it is small with delicate, white flesh that is absolutely delicious the way our cook fixed them–lightly breaded and pan-fried. She served us just two, which were about the size of the palm of my hand and about as thick. Their flavor reminded me of the sunfish and bluegills that I caught as a child and my mother served up crisp and brown. After dinner, it was common for the quests and our hosts to gather around the TV to watch the various variety shows, game shows, or one of the soaps. I seldom participated in these gatherings, other than to stand to one side for a few minutes trying to follow the Spanish. But nearly all of it was beyond my

comprehension. Besides, I usually felt pressured for time and would head back to my room to record the day's events, jot down some thoughts, read, draft or edit my reports. Occasionally I would study my Berlitz book on Spanish.

The *Corteses* did not eat their evening meals with us. Instead they ate later using a small table in the kitchen. When finished, they would join us around the living room TV. They were probably in their early sixties, showing some gray hair and expanded waistlines.

They lived a quiet, frugal, and what appeared to be a contented life. They neither fussed over their guests nor resented our presence. *Señora* Cortes would often have a small group of ladies over for tea on a Sunday afternoon. *El Coronel*, as he liked to be called, was affable yet quiet. He had retired some years earlier from the Bolivian army. A picture prominently displayed in the living room showed him standing with fellow officers that revealed him t be a captain.

Later, he explained, that he was upgraded to Coronel upon his retirement. All in all this was a pleasant, comfortable place to stay and well within the per diem paid by AID.

After breakfast on my first morning at the *Pensión*. I walked the short distance to *Arequipa*, crossed the busy street, and waited at the bus stop. I was early enough so the bus stopped for the half dozen of us who were waiting and I was able to board, but not get a seat. Alighting from the bus, I walked to the DGA, where Axel was waiting for me. After a few pleasantries we got down to the object of my assignment. I related what the AID Mission had told me was necessary in obtaining US approval for a loan to the Peruvian government. He in turn told of his country's interest in helping poor, small-scale irrigation farmer in the Sierra. They were an important political group, especially because of their number and the attention President Velasco was giving to them as part of the cooperative movement, as well as the aim of slowing rural-to-urban migration.

By the end of the first week Rollo had taken me to the Iowa State University Mission in Lima to meet its Director. The Mission had the dual purpose of conducting or supervising macro-economic studies on the Peruvian economy. The Mission also provided administrative support for consultants such as myself. We then met Osorio, a Peruvian citizen of Greek origin,

who was in charge of administrative services, such as typing, photocopying, and making travel arrangements. I was soon to find him extremely helpful when I needed a quick turnaround on the various drafts of my reports. How interesting that 24 years out of Iowa State, I would be relying on my alma mater, and to meet Randy Hoffman who had graduated from there the same year as did I.

That same week Axel introduced me to James Seagraves, one of the DGA advisors. Seagraves was a curt, but competent economist from the University of North Carolina on a six-month assignment to study the applicability of a linear programming model for setting production and pricing targets for Peru's major food crops. He had been to Peru several times using the Iowa State Mission as his base. When Jim invited me over for dinner later in my assignment I learned that he was to be here for six months without his wife, except for a couple of weeks in the middle of his stay. When I asked him how he handled being away from his family for so long, he said, "Oh, that's not so hard." I wondered how this could be, since I was finding it hard to be separated from Vicky and the kids for so long. I got the answer during one of my subsequent visits when he told me he and his wife had divorced. For my part, while I dearly missed being home, I only wrote a brief letter weekly and called only three times during my entire stay.

That week Axel also arranged for me to meet with ONERN¹, the National Planning Institute (*Instituto Nacional de Planificación*), and an economist in the Ministry of Agriculture. I had told Axel about how in writing my dissertation I had relied on reports published by ONERN and therefore was interested in learning whether their data base would be useful to us. Turns out that we didn't rely on them. But what I remember most was using the urinal at their offices in which an electrical plug-in was located near the base. I don't know if it was functioning or not because I made sure to steer clear of it. I wanted to learn what those at Planning thought about our proposed project and what they might have on shadow prices.

¹ The Spanish acronym for the *Ofecina Nacional de Evaluación de Recursos Naturales*, or the National Office for the Evaluation of Natural Resources.

While they were polite, we came away empty handed. Finally, Axel took me to met with an economist in his own Ministry of Agriculture. He too exhibited little interest in our project. After these visits, it became clear that we were on our own, disappointing in that we had failed to find useful collaborators at the broad, national level for that is where national policies and shadow pricing are best dealt with. This meant that we were free to do this work unencumbered by them. How different the role of Planning here was from my experiences with the Planning Commission in Ethiopia.

The following week Axel and I brain stormed about what we might accomplish during my time in Peru. Soon Axel had an idea. He brought out a 1968 report by Luis de Bihan, *La irrigación en el Perú*, which identified 115 small-scale projects submitted by independent groups of farmers and cooperatives in the Sierra. The beauty of this report was that it had the support of both the Ministry of Agriculture and the local participants. Besides benefitting the target group, the approach would employ rustic yet well-known technologies suitable to the area that were labor intensive and savings in domestic capital and foreign exchange, And it was highly divisible thereby speeding up implementation and reducing overall risk—in comparison to a single, large-scale project that would take much more time to implement and increase the risk associated with a single, large investment.

Because of my teaching at CSU Axel and Julio persuaded me to give a series of lectures on project analysis to about 15 of the DGA staff. I preferred not to spend time on anything other than my prime responsibility in developing the PID. But eventually I yielded partly out of courtesy and partly because I could give these lectures without much preparation. So, for the next several weeks, except when I was outside Lima, we would meet from seven to eight in the morning. The upside, which helped make this decision, was that I had to give them in Spanish, which helped improve my abilities in the language.

After completing the foregoing meetings Axel and I reviewed the various highland areas where we might concentrate our efforts. While the size of the loan was to be substantial, it could in no way cover most highland farmers. Nor would one want to, given we were

introducing an untested program. However, if our efforts were successful, they could serve as an example of what could be done not only with AID support but by other donors.² Axel thought of three areas: Cajamarca to the north, Mantaro east of Lima, and Arequipa to the south. We chose Cajamarca because the area comprised commercially active and independent farmers and was the site of important development work funded by Belgium and lead by Pablo Sanchez, a charismatic conservationist. We chose Mantaro because of its easy access from Lima and was a source of agricultural products destined for the Lima market. An advantage of these two locations was that many of the DGA team came from there and they would enjoy supervising the project as it progressed. While the Cusco area had considerable potential, its populace were of Inca heritage that operated through cooperatives, which would require time to understand and care when designing and implementing new activities.

Once the Ministry approved our selection, Axel and I met with Fowler, the AID Director, Rollo, Wendy, and Janet to present our findings. I preferred to play a supporting role, so I encouraged Axel to make the presentation, which he did effectively. Fowler approved the two locations. So, we were ready to move.

Axel's team of five and I left Lima December 12th. Heading north we passed through the port area of Callao and continued north along the coast on the Pan American Highway. I was surprised to see that Lima is virtually an oasis in a desert. Before arriving in Lima I had imagined it to be a lush tropical area, since it bordered the Pacific only eight degrees off the equator. What I didn't realize was that it scarcely ever rains in Lima, rainfall averaging only eight-tenths of an inch annually. Sometimes it doesn't rain at all during the year. But what of the verdant settings for suburbs like San Isidro and Miraflores? The answer is two-fold. First, normally the city does not suffer a water shortage. The *Rio Rimac*, which flows through the northeastern part of the city, carries water from the Sierra where rainfall is abundant. Second, for a good portion of the year, except for the summer months and a few months on either side,

² This proved to be the case. A few years later I learned that the World Bank and Germany had approved similar projects based on our initial effort.

heavy fog comes in off the Pacific to raise the humidity level to nearly 100 percent. This chilly fog results from the cold Humboldt Current flowing up from the Antarctic. Reminds one of San Francisco's fog. The humidity is pervasive and high enough for eucalyptus trees to survive on the hillsides bordering the ocean that allow water harvesting through the use of plastic sheets. Sometimes water drips from the iron railings of buildings. With such a water supply, I have seen gardeners irrigate the grass, shrubs, and trees along the boulevards, yards, and gardens. One of the parks near the *Pensión* contains an olive grove said to have been planted by Francisco Pizarro.

On our way through barren lands we encountered an occasional sugarcane plantation irrigated by water from one of the rivers originating in the Sierra. Around noon we passed through Chimbote, a large community that had been devastated by a major earthquake only four or five years earlier. Because of Edilberto's Inca heritage he wanted to stop at the Chan Chan ruins near the coast just outside Trujillo. Chan Chan at the time was rated as the earliest Pre-Columbian ruins in Latin America. The dry, dusty climate has preserved the site quite well while casting a coat of brown silt over the remains. After eating in Trujillo we continued on to Pascamayo. Before turning in for the night *Edilberto* and I strolled along the beach front conversing in a mixture of Spanish and English. By switching drivers we had made steady progress, covering the 600 km by nightfall. Memorable of this long trip, aside from the desolation of much of the area was the high spirits of the team. One tale followed another, encouraged by Axel. I got the drift of many of them, except when the joke was on a *play on words*.

It was interesting how some sayings carry over from one language to another, though not as a direct translation. For instance, the Peruvian say that *un pájaro en mano vale más que cien volando* (a bird in hand is worth more than one hundred flying) versus our saying that a bird in hand is worth two in the bush. Same idea, though. One of my favorite jokes was:

Traveling along a major highway, a driver of a pickup truck stopped to offer a hitch hiker a ride. But then he noticed that the fellow had a tethered burro along side. What to do about the burro? "No problem," said the man. I have a long rope and we'll just tie

him to the truck." Shrugging, the driver said, "Okay." and started up. First, he drove very slowly while gazing at the burro through his rear vision mirror. At intervals, the burro's owner would say, "Drive faster." Eventually, they were up to 40 km per hour, when the driver suddenly said, "Oh my gosh, it's tongue is hanging out" And the owner asked, "Which side?" Looking again the driver said, "The right side." Well, said the man, "He wants to pass you!"

By the time our trip had concluded and I had heard so many of these; we came to the point where the guys would ask me whether a joke was good enough for me to translate it into English.

Sadly, the one above is the only one I remember.

The next morning we headed into the mountains along a winding, well-paved, two-lane highway. We passed Jequetepeque, one of several large dams and reservoirs that the World Bank had funded primarily for irrigating the nearby coastal plain. We reached *Cajamarca* around noon, checked into our hotel, ate lunch and began the visits that Axel had arranged from Lima. First on our list was a visit with Pablo Sanchez at the local university's forestry department. He showed us his conservation work that involved the restoration of denuded hillsides. The restoration involved building interceptor ditches along hillside contours, which captured the runoff that could then be used when planting seedlings. The surplus water was then directed to small ponds stocked with fish and surrounded by eucalyptus. The site we visited was idyllic. After only several years cattle were grazing the hillsides, farmers had planted gardens, and fish were thriving in the ponds. Years later, I was able to see Pablo's work on environmentally designed houses built with locally available materials that were cool in the summer and warm in the winter. By then his funding had come from a wider range of international donors. Even with international acclaim, he had maintained his self-deprecating charm.

From there we contacted the regional development office, extension, and other local officials. Some of these contacts had participated in identifying small irrigation schemes listed in the Bihan report. So, they gave us an enthusiastic welcome. We visited some of the proposed sites within the Cajamarca watershed. Generally, these sites involved building small

earthen dams, delivery and drainage channels, and some land clearing to accommodate crops such as potatoes, wheat, barley, and vegetables as well as grazing areas for cattle. Potato production is prevalent across Peru's Andean highlands, which did not come as a surprise, since Peru is reputedly the home of the potato and the site of the International Potato Center. Wheat was of interest to our team, since increased production would help replace the country's large expenditures for this import. Barley is well adapted to the highlands, and beans and other vegetables have a ready local market and for the farmer's own consumption. On this short trip the team passed over visits to remote sites, which would require days on horseback to reach. At this stage we were simply appraising the degree of interest, the nature of prospective sites, local demand for increased production, and the availability of materials, especially labor supplied either by benefitting families or hired.

One evening in the darkened room that we were sharing Axel showed me a *cherimoya* that he had purchased in the market saying it was his favorite fruit. It had the shape of a large artichoke without the detachable leaves. He quartered it and handed me one of them. Looking as best I could in the dim light, the interior looked like a cream-colored pomegranate but without the seeds. Then, I saw movement! It was crawling with small, light-colored worms. When I pointed this out to Axel, he said, "Oh, yes. They often have lots of them. Just eat around them." Which, to my amazement, I did. But I soon stopped after I realized what I was doing and handed what I hadn't eaten back to him.

By the fourth day our team had seen enough and we drove back down the mountain, got onto the Pan Am highway, and headed for Lima. This time, the intent was to make the trip in a single day. By sunset, Axel and Edilberto had taken turns and were ready for someone else to drive. Edilberto turned to his friend Maraví and say, "You drive." But Maraví, was not an experience driver. Besides, with his short legs he had to sit on the edge of the seat just to reach the peddles! He had to squint through the steering wheel to see the road ahead. Making the situation worse was it was growing dark. When the sun had finally set, the cloud cover blocked the moonlight and the unlined asphalt surface seemingly swallowing up whatever light did come through. Still more worrisome were the occasional unmarked truck parked alongside the road

with part of its body extending into our lane. If that weren't enough Edilberto kept urging Maraví to drive faster chiding him by saying, "You don't know how to drive. If you did you'd drive faster and we'd get home sooner." A frightening experience because I remembered how Orville Heim's buddy had been killed in Venezuela when he drove into an unmarked truck stopped in the middle of the road. Repeating the Lord's Prayer was about all I could do. But we arrived in Lima safely at 3:00 a.m.

It was on this trip that I got to know Edilberto better. He had straight black hair, a light brown complexion, and the short, chesty stature of his Inca ancestry. I hadn't been in the DGA office long before some of the other engineers began relating stories about him. He was a true dare devil: first up the mountain or first to jump into the cold Pacific water, a student leader, and a political agitator, even fighting with a traffic cop over an intersection accident. Once during a major earthquake that rocked the DGA building I saw him standing by the window absorbed in the spectacle while others headed for the stairs to descend to the street eight stories below. Exhibiting no fear he yelled after them, "Come here. Look! when the building sways this way you can look *straight down to the street*!" Government officials knew of him and his reputation, occasionally resulting in his being stripped-searched at Lima's international airport. All this with a PhD from Germany while still in his twenties. Years later, he told me about his humble beginning. It went like this . . .

His family comes from the Inca line--Atehuelpa, the northern clan originally centered in Quito, Ecuador The family changed its name to agree with their Spanish landlords, i.e., Guevara and Fernandez. The family lived more than five hours on horseback north of Chota, which is north of Cajamarca. The family farmed good bottom land and a hillside plot for years, but without title to the land. Eventually a politician in Lima gave title to their land to one of his friends who came to claim it. Some rebelled, but his father acquiesced and became a sharecropper. After Edilberto finished the first three years (K - 2nd) his father arrange for an acquaintance to come to their area to teach third, fourth, and fifth grades to about 30 of their extended family. When the landlord

heard about this arrangement, he told Edilberto's farther that he would not allow this to happen, saying "These children have as much education as they'll need to follow in their parents' footsteps on his land." Being upset about the landlord's response, Edilberto's father told the children not to tip their hats or bow to the landlord when he rode by on his horse. Angered by this the landlord searched out Edilberto's father, came up to him, whip in hand saying he would teach the children manners if the father wouldn't. His father went inside their small home, brought out a rifle, and said he would shoot the landlord if he dared touch any of the children. Shaken, the landlord rode off on his horse. His father had called the landlord's bluff and Edilberto's uncle came and taught these children. The uncle's teaching credentials were a fifth-grade education he had obtained through a correspondence course from Spain.

After finishing the fifth grade, the children went to a district, north of Chota, to take an entrance exam for the next level. Edilberto said he came in first out of the 75 who took the exam, thereby earning a scholarship for the next level. Those administering the exam said they couldn't give Edilberto first place because it would look bad not having one of their own students come in first. So, they awarded Edilberto second place.

Meanwhile, a new landlord replaced the existing one and the wife of this new landlord heard of Edilberto's accomplishments and arranged for him to go to Chota for secondary school (6th - 10th). While there Edilberto lived in a rooming house with two others from his area. Again, Edilberto came in first on his exams and was offered a scholarship to become a teacher. But Edilberto declined saying he wanted to become an engineer, which one of his teachers had urged him to be. So, he came home. Meanwhile, his father had died. Without the scholarship, Edilberto needed money to support his engineering studies

at La Molina in Lima. So his elder brother sold three of the family's cows to help cover the initial costs.

Arriving at La Molina too late to take the entrance exams the university officials said he could enroll in a pre-university program or wait until next year. Edilberto chose the later, informed his brother, and waited for him to come to Lima. Once there, he and his brother went to a china factory where they told the plant's managers that they wanted to hawk the factory's plates on the street—something that had not been done before. Thinking this over, the manager recognized their offer as creative entrepreneurship and agreed to their suggestion. Together in just three months, the two of them had earned enough money to finance Edilberto's whole first year. Edilberto placed second on the entrance exam and eventually graduated second in his agricultural engineering class. While in school, Edilberto became active in student politics often leading efforts to improve students' conditions.

Upon graduating with honors in agricultural engineering, Edilberto applied for entrance and funding at Utah State University. When these arrangements became bogged down, he explored possibilities in Germany. The Germans accepted him, including a scholarship, and off he went to Germany. Incredibly, in two years he graduated summa cum laude with a master's in agricultural engineering form Justes Liebig University. Three years later he had his PhD in water resources planning from Christian Albrecht University, also in Germany, and again graduating summa cum laude. How he learned enough English to pass the English exam required by Utah State University or enough

German to succeed in Germany, I never asked. He must have picked up some English at La Molina, but he did tell me that he knew *no* German before going to that country.

During the next week, I summarized the results of our trip, met with Rollo, began writing my report, and, with Axel, planned our trip to Huancayo. As Christmas day drew near, Rollo invited me to share dinner with him and his family. When the day arrived Rollo and Ginny picked

me up at the *Pensión*. It was on the way to their house that I got a second look at his temper. It was such a silly thing. As he was about to turn onto *Avenida Arequipa*, Ginny said this is the wrong place to turn--and he flipped. But it was only for a brief moment and then it was over.

In going back and forth between the *Pensión* and the DGA I preferred using *colectivos* or the bus, both of which regularly traveled between San Isidro and the center of town. *Colectivos* were minivans licensed for public use, restricted to a given route, and seating seven passengers comfortably--more uncomfortably. But even these could be difficult to catch after work. Each van posted a placard on its windshield that specified its route assigned by the municipality. The vans that cruise along *Avenida Arequipa* have several routes that usually disperse after reaching *Miraflores*. The drivers of these vans cruise along at less than the speed of traffic, unless filled up, searching for passengers standing at curbside. If not interested, the ones waiting for a bus would waive the driver away. At other times when spotting a potential customer, the driver would abruptly pull over to the curb without bothering to look for drivers behind him. As irresponsible as this seems I never saw an accident resulting from such maneuvers, probably because of the slow pace of traffic and an awareness to such practices by the *colectivo* drivers. In time, I relied less and less on the bus for my end-of-day trip and more on the *colectivos*. But even these could be difficult to catch after work.

Riding the bus was seldom a problem in the morning. If I missed one another would soon come along. They all were heading to the center of the city, where I worked. While boarding one was nearly certain, getting a seat was another thing. Occasionally they were so crowded that

passengers stood on entry steps, sometimes to the point that the door couldn't be closed, so that they were leaning outside the bus itself. But at least they had a ride. The real problem was on the way home. Busses that went to San Isidro and beyond more likely than not would zoom by a waiting crowd because they already were packed. At the beginning, I would wait until I saw several buses pass me by, walk three or four blocks to the next stop, have the same thing happen, walk further, until I was practically home. By then, I would just give up and walk the rest of the way—a full five kilometers.

Taxi fares were not expensive, but these were not covered in my per diem and at that time I was trying to save money. Vicky and I needed to plan for our children's education: Becky had just started at CSU, Tim would apply for college soon, and Mike and Paul would follow eventually. So, our finances could be stretched. But even if they were not, I simply wasn't used to spending money this way when there was a cheaper alternative. And I liked mixing with the crowd, rather than acting like a well-healed consultant.

As the above implies, Lima traffic was heavy, but not as heavy as it might have been. One of the ways the government addressed this problem was to issue private stickers whereby the driver could use his car on Mondays, Wednesdays, and Fridays, on Tuesdays, Thursdays, and Saturdays. Both groups could drive on Sundays. To get around this restriction, some families had two cars each with a sticker for each set of days. I don't know what the traffic would have been like had this restriction not been put in place. Another Government adjustment, at least for those in the public sector, was to begin work during the summers at seven and end it at one thus eliminating the lunch break. This change in hours favored those who regularly went to the beach, which was a nice change of pace.

The day after Christmas Axel gathered up his team and we headed for the Mantaro Valley, straight east of Lima. We began our ascent even before leaving the city limits. Soon, we were above the cloud cover, felt the cool crisp air, and delighted in seeing the sun. The climb was straight up reaching a peak of 15,900 feet at a pass called Abra Anticona just before the mining town of La Oroya. From there we descended 5,000 feet to the wide fertile Mantaro Valley and

before long entered the provincial capital of Huancayo. That afternoon we met with regional develop officers, who were well aware of the small irrigation projects listed in the Bihan report. Their offices were staffed with competent engineers and technicians who knew the weather patterns and hydrology of the area and could locate water supplies, supervise construction of small earthen dams, and delivery and drainage channels. They were ready, once funding and project deigns were available.

The next day, our local counterparts showed us several possible sights for development. Next, we turned to the Extension Service, which could be an important group in providing improved farming methods and credit to farmers. Instead of finding an interested party the Zonal Chief give us the "party line." He was in charge of a program called SINAMOS, the Spanish acronym for National System in Support of Social Mobilization. The program was mainly political and followed President Velasco's efforts at socializing the economy by converting private agricultural land into agricultural cooperatives, nationalizing basic industries, and forcing profit-sharing for those industries not nationalized. It would seem that our project, by focusing on the rural poor, would mesh with SINAMOS's objectives, but their interests were elsewhere. After covering a lot in just one and a half days, we headed back to Lima.

Once back, I met with Axel to organize what was needed from his group for the report we would present to AID and the DGA. I outlined what I thought the AID Mission required of the PID and laid out the benefit-cost approach that I had used in teaching the projects course at CSU. Axel said he was able to provide the technical inputs for the type of small-scale irrigation projects for the two regions. And, together, we agreed on what help we needed from Rollo and Wendy.

I then talked about national objectives and how our proposal would respond to these. I used the examples of helping stem the migration of those in the high Sierra to coastal areas, raising the income level of the poor there, lowering wheat imports, etc. I explained the concept of shadow prices as representing the true value to the economy of domestic capital, foreign exchange, and farm and construction labor, as compared with market prices. Then I went over some of the standard concepts of Engineering Economy. These included such things as

comparison of alternatives including the "do nothing" alternative, discounted cash flows, rate of return and net present worth algorithms, the distinction between economic (is an investment a good use of resources) and financial analyses (are the funds available when needed), and sensitivity analysis. I did not expect him to be responsible for these benefit-cost analyses. But I thought it important that he know the types of data needed for the analyses to be included in our proposal. As a guide, I left my book, *Project Planning for Developing Economies*, and promised to work through an example before I left

Then we delved into what his group would provide for each of the locations to be incorporated in our report, such as, rainfall, irrigation practices, cropping patterns and rotations, yields, market prices, net sales and home consumption, use of family labor for construction and production, amounts and costs of crop inputs and hired labor, rustic designs and construction methods, costs of maintenance, and other items such as water storage and drainage, and pasture and livestock improvements. To gather some of this information, Axel's DGA team would need to revisit Cajamarca and Huancayo, but he knew that. He might also want to keep in touch with Rollo and Wendy for their help and advice.

At this point the *crunch* was on. I spent my days at DGA with an occasional trip to the AID Mission to keep Rollo and Wendy informed. At the *Pensión* I would go to my room after dinner and frequently work past midnight. During these days I would occasionally have lunch with my DGA friends. Because of their modest salaries they would seek out places that catered to those with modest incomes. These places might be little more than a small room fronting the sidewalk. Typically they offered a plate of rice and potatoes with just a sliver of meat. No salad, no vegetables. Though tasty, I never got used to the combination of rice and potatoes.

Although I worried about not getting everything done before my departure, I did relax New Year's eve when Axel's group threw a small, in-house party during the afternoon. The female engineers had taken over in arranging food, drinks, and songs. It was there, for the first time, I saw them exerting their womanhood and expressing certain political thoughts in support of President Velasco's socialist leanings. That evening I went out with the Corteses to the Crillon, a

fine hotel in downtown Lima. I was to go with a widowed friend who lived next door To my surprise Coronel Cortes really kicked up his heals, bought bottles of champaign, and danced to the wee hours. My partner was nice and we politely danced, but she was older than I, somewhat over weight, and reminded me of my Aunt Florence. I felt pity on the Corteses. Here, they were spending money lavishly when normally they skimp so much day after day. I tried repeatedly to split the bill with him, but the Coronel would have none of it. So, recalling the insult I had made in Zacatecas years earlier, I accepted his hospitality.

I ended up writing a 75-page report in which Axel, Lizarraga, and Wendy provided their inputs. Following the format I had learned at SRI. The headings were Background, Summary and Conclusions, Program Design, General Concepts, a Tentative Loan Proposal, Continuing the Study, and appendices on Investment Opportunities in Cajamarca and Mantaro, Illustrative Benefit-Cost Results, and a Note on Income Distribution.

I was familiar with the general approach to project evaluation such as the above. But what was new *and interesting* to me was the development of the technical details of cropping patterns, rotations, and irrigation works and operations. By "directing traffic" so to speak, I ended up being responsible for the work of a lot of people, something I hadn't done before in project evaluation. Up to this point, my experience had dealt largely with reports of my own writing.

With Axel present I had my final meeting with Fowler, Rollo, Wendy, and Janet, which went well enough. The Director suggested I come back in the spring, assuming AID/Washington accepted our PID. My responsibilities would be to help the Mission prepare the (PP) preparatory to a loan agreement between the two governments. Earlier I had heard Rollo ask the Director, "Where did they find someone like me?" He then went on to tell me that I was well-suited for this type of work. Nice to hear after getting beaten up at CSU, which suggested that I was more suited for international work than being a university professor. Still, I wanted to give university life a try hoping to merge international assignments such as this with academic activities.

After saying goodbye to those in the room, I returned to the *Pensión Cortes* and packed. Rollo invited me to his home for dinner where I was joined by Axel, Wendy, and others. I had brought my bags, so was ready when Edilberto stopped by to drive me to the airport for my 1:15 a.m. flight home. Reflecting after I had settled in, I was pleased with having completed a difficult assignment and with the many friends I had made. Both AID and the DGA had made me feel comfortable not only at work but in the evenings. All told I had been invited to dinner seven times—by Rollo, Wendy, Axel, Julio, and Edilberto. Axel had introduced me to a favorite local dish, *ceviche* (raw sea bass marinated in lemon juice) and Julio to his favorite drink called *pisco sour* that I found delicious. Fortunately, this brandy-like drink is sipped slowly from a small glass. Limes give the drink its sourness and the beaten egg whites on top smooths away its harshness. I hadn't seen any Peruvians drink *pisco* straight.

Even so, it was not always smooth sailing. I was continually pressured for time and there were the tremors and the "trots" to contend with. The occasional earthquake, which shook Lima, could be disconcerting, given how serious some of them had been in recent years. And diarrhea was an off-and-on problem, which comes with the territory when working in the so-called developing countries. Fortunately, *Lomatil*, the medication I carried with me did the job. I never had an accident, but once while riding a bus to work I thought I wouldn't make it. Even so, I thought this assignment in which I missed Thanksgiving, Christmas, and New Year's as well as Vicky's and Becky's birthdays would put me on the right track at CSU.

May 26 - June 13

On this trip I flew Varig, an excellent, Brazilian airline, out of Los Angeles that put me in Lima at 1:00 a.m. (Much better than the usual 6:00 a.m. arrivals.) No one met me, which was fine, so I hailed a taxi and went directly to the *Pensión Cortes*. I rested, then went to the DGA where I learned that Axel was home sick. So, I met with Lostao and Lizarraga, and was introduced to Manuel Paulet. The DGA had gotten Paulet to assist them on the technical side of irrigation. He was the Head of Agricultural Engineering at La Molina and an excellent choice, since he could provide technical guidance in an area I didn't know. They brought me up-to-date on their progress. (AID staff were off enjoying Memorial Day.) By 3:30 I began to sag, so I

begged off, returned to the *Pensión*, slept till 6:00. That evening I dined with the Paulets, who lived in a modest home nearby in *Miraflores*.

The next day I went to the AID Mission where I met with Wendy, Janet, and Mike DeMetre. Mike was a young technology specialist from AID/Washington. He had received his master's degree at Stanford in the same program as the one I had been in. He said he had read my dissertation and liked it. That should help, I thought. He and Janet were working with linear programming on the possibility that this optimization technique could be applied to our project. I had my doubts. I had studied LP at Stanford and, so, was familiar with its assumptions and uses, but not the details of its application. To my mind, LP could identify relevant topics for further study, but was seldom sufficient for making decisions from its findings. Jim Seagraves' work on agricultural commodities was probably a good application. It was at this meeting that I learned that our project had been named *Plan Meris*, the Spanish acronym for *Improved Water and Land Use in the Sierra*. After the meeting I began looking at the requirements for the PP. That evening I went to an informal cocktail party at Lostao's home where I met Pocha, his lovely, young-looking wife.

Peruvians, as in other Spanish cultures, eat their meals and plan their parties late (recall Madrid). Another characteristic, which Vicky and I found out, was not to show up on time. That can be embarrassing. So, arriving 30 to 60 minutes after the appointed time is about right. Axel told me the story of an advisor from the States who was unfamiliar with this custom. During his first trip to Lima his Peruvian counterpart invited him to dinner. When the advisor showed up at the appointed hour the host was astonished. He hadn't shaved and was still in his work clothes.

By week's end, I had been invited to dinner two other times and, over the weekend, to a *despedida* (going away party) for Axel's friend, Abelardo de la Torre. The party was held at the *Rimac Restaurante*, adjacent to the *Rimac* river where they served traditional food such as blood sausage, fried intestines, and the like. I nibbled, just to be polite, but little more. So, my time in Lima was not all work. I found the Peruvians, gracious, family oriented, mild mannered, and

friendly to outsiders. And their love for music was evidenced by the pervasive songs coming from homes, office buildings, *colectivos*, and along the streets. The music was typically Latin American influenced by Cuban and Brazilian song writers and musicians. The plaintive love songs, such as *Perfidia*, were sometimes tough to take when far away from home.

Working with Manuel was a delight. Looking ten years my junior, he had accomplished much in a short time. And he knew Peruvian peasant agriculture. Thus, he augmented Axel's knowledge, especially in irrigation. He listened to my thoughts about economics and I listened to his on irrigated agriculture. And he was a hard worker, staying late in the office when necessary. We only disagreed on one matter. He brought up the problem of erosion from hillside agriculture. I told him this didn't bother me. My argument was that in many cases the rate of sheet erosion due to hillside farming is low amounting to only a few inches of soil over the 30-year life of our assumed analysis period. Because of the power of compound interest, erosion in these later years would have little effect on profitability--specially for a minor percentage loss in the root zone. Of course, where the initial soil depth is shallow, any soil loss could be serious. Paulet, listened, appeared to disagree, but kept his silence. In retrospect I might have been wrong. Years later I was to revisit this issue via an article I wrote on the economics of natural resources.

One day while working at the DGA, Axel introduced me to Ted Olson, an irrigation engineer from Utah State University. Axel said that Ted had advised them on irrigation in Peru for years. He didn't endear himself to me when he said he had looked at our January report and thought that such economic analysis was a waste of time. Then I remembered that Rollo had said that the guy working on the same subject as I was couldn't put together a program and I wondered if that person had been Olson.

This time in Lima I was to experience the chills of a tropical winter. The cold and oppressive cloud cover was onerous. During these times working at the Ministry was not easy. The building was neither heated nor air conditioned and the windows were poorly fitted so that the occasional strong winds off the ocean making their way through the cracks cooled our room to

what felt like fifty degrees. In an attempt to live with this situation I would came to work wearing several layers of clothing. I might have on one or two undershirts, a dress shirt, a short-sleeved sweater, and a sports jacket. In contrast, my Peruvian counterparts didn't seem to mind. When I became so distracted by the cold I would pack up and head for the *Pension*. One rare day when the sun broke through the clouds I hurried from my room to stand in the street just soaking up the sun.

With preliminary values in hand I had prepared an overall implementation plan for the Mantaro Valley; selected Chingol as an illustrative project, analyzed it, then summarized the procedures I had used. For this I needed to estimate shadow prices for capital (somewhat lower than commercial interest rates), foreign exchange rates (existing restrictions on foreign exchange meant it was under-priced), and common labor (would be below the going wage rate because such workers were abundant while job opportunities were limited). Then I went over all this with Axel, who picked up the approach quickly. This was important, for he was to be responsible for directing his crew in analyzing the full compliment of projects in Mantaro and Cajamarca.

Things were moving nicely and before long my last week was upon us. Paulet was staying at the DGA office past 7:00, I would drop off drafts of my report with Osorio for typing, and used the IBM Selectric he had loaned me so that I could type the last few pages of my draft in my room. Still having much to do the day before I left, I worked till 3:00 a.m. showered, relaxed, and finally dozed off at 5:00. I rose a few hours later to work some more. Then Axel and I went to a meeting with Wendy and Rollo. She said she wanted a full 15 projects analyzed in detail during my absence. Axel and I agreed, but reluctantly. After our meeting I returned to the *Pension* to pack and an AID driver took me to the airport for my midnight flight on Braniff.

This last day in Lima had been so hectic and working conditions so cold, that I had no time to get out of the clothes I was wearing. So, when I went through Customs in Los Angeles, the official noted the bulges around my waist and asked if it were cold I Lima. I answered innocently, "It sure is." Then with a smirk he motioned a nearby inspector to cover for him. Turning to me he asked me to accompany him. We went into a small room off to the side.

Without explaining what was up, he told me to take off my sports coat, then a wool cardigan, the sleeveless sweater under that, my dress shirt, and finally an undershirt. Finding nothing, he told me to put my clothes back on and we returned to his inspection station. Rather than feeling threatened or annoyed, the whole process amused me. He in turned had a sour look on his face. I'm unsure whether he was disappointed in not finding anything, or with me for dressing the way I did. Out plane's stopover in Bogatá as a fueling stop might have triggered his suspicious.

July 29 - August 29

On the first day back in Lima I went to an AID planning session with Rollo, Wendy, Lostao, Axel, and Lizarraga where they went over what had been accomplished during my absence, which wasn't much. Janet explained this lack of progress by saying I was crazy asking for so much detail. But, Rollo countered by saying that the AID/Washington Manual called for the type of analyses I had set up. Then we settled down to discuss what still needed to be done to get the PP ready for submission to AID/Washington. It was here that I learned that Axel was essentially out of the picture because he was getting his family ready to go to the States. He had obtained a Ford Foundation grant to work on a PhD in resource planning. He chose CSU partly because he had received his MS there several years earlier. Later, he asked me to be his major advisor, which I was glad to do. So that might have had something to do with his choice.

My work with the DGA and the AID Mission was similar to what I had been doing during my previous two visits. An important change was that I had taken Rollo up on his suggestion that I bring a graduate student to help alleviate me of many of the details of my work thereby leaving me time to look at the broader issues. One of these issues was to summarize the overall impact of the project on the Peruvian economy together with the overall size of the loan. Lizarraga helped me with the latter. The first week after my arrival that graduate student joined me. She was Pixie Ross who was by far the best of those who had taken my Projects Planning course. Her Department Head, Ken Nobe, said that she was one of the best students he had ever

had at the master's level. Pixie's father had worked for AID in the Far East and she had spent many years living overseas. So, she had a feel for the type of work we were doing. Pixie was a young, no nonsense gal who was excited by the chance to come to Peru. Even though she was not the glamorous type, I didn't want to give my colleagues in Peru the wrong impression So, I arranged for Janet to look after her during her stay.

One late afternoon at the office as we worked side by side, she noted that I was doing calculations by hand. It amazed her when I said I could do this quickly and accurately. She gave me a side-wise glance and said, "You can't be serious. Here, use my calculator. Just turn it off when you're not using it." That may have been the first time I had seen a handheld calculator. What a help that turned out to be! Back in Ft Collins I had learned that Pixie was an excellent golfer so when Rollo brought up the possibility of playing at the *Campo de Golf* in *San Isidro*. I gladly accepted. It was during our round that Rollo's temper flared up again. But we payed little attention to it because golf can bring out the worst in the gentlest of souls.

While I was thus engaged at the DGA, Janet began programming my analysis procedures so that one of the local bank's computers could calculate the rates of return. Jim Lee of the AID Mission was the link to one of the computer. Pixie did the key punching. While the turnaround time was slow, this approach reduced hours of tedious calculations, while also reducing errors. Besides, with the program in place we will have left something useful both to the Peruvians and the AID Mission—a form of institution building that AID encourages.

Wendy helped a lot. Quietly, she focused on AID's loan requirements, which she would later work into the PP. She also knew much more than I about implementation in terms of local research and extension needs in Huancayo and Cajamarca. During one of our meetings Wendy introduced me to Peter Oostercamp, a Dutchman with considerable time in Peru. He was here as an extension of Holland's program of international development, similar to our Peace Corps. He knew the High Sierra in Peru and provided important information on local extension activities there. Wendy also wrote into the final version of our paper the details of a technical assistance

contract that would be provided by a US contractor. This requirement, about which I was unaware, was common for most of AID's loans and grants.

Again, before I realized it, my time in Lima was about over. During these last few days, I would stay at the Pension to write the draft of my final report that summarized the procedures we had followed and our results. One of these last days I worked till 3:30 in the morning, read a novel to relax, and went to bed by 5:00, got up three hours later, and went to the DGA. I spent some time with Paulet about crop choices for the Chicche project in Huancayo. That afternoon I went to the AID Mission for a final meeting with Rollo, Wendy, Lostao, and Lizarraga where it was agree that Pixie would stay on to finish up my calculations, appendices, and whatever else needed doing. The last night I started working on the appendixes, but was unable to finish because of the confusion that was to occur the next day. That day, which was the day of my departure, Julio arranged for me to meet the new head of Aguas, Sr. Guerra. During our meeting, carried out in Spanish, I summarized our project emphasizing how our analyses ought to be based on reliable technologies so that they would be bien fundido. This brought a big guffaw from all of them. What I had said was that the projects needed to be well blown up! I should have said bien fundado (well founded) Such a big difference a single vowel can make. With the meeting over, Lostao, joined by others from the DGA, invited me to a fancy Argentine restaurant noted for its wide choices of excellent meats. Guerra was to join us, but he failed to show up. It was then we learned that President Velasco's government had been overturned by a military coup. That shot the rest of the day. For awhile we sat around wondering what to do. What was going on at the airport? Would it be safe to go there? Finally, we heard that others were going there so I agreed to risk it. Rollo arranged for an AID driver to take me there.

We got to the airport in half an hour without incident. Once there, pandemonium reigned. During the week, Lima had been the site of a Latin American Conference of Unaligned Nations that had just ended. As a result *hundreds* of diplomats had descended on the airport for their departure. After considerable dely, and some doubt whether planes would fly and, if so, would I be given a seat, I departed at midnight.

Epilog

The following year I heard that the PP had been approved and that a loan agreement for 20 million dollars had been authorized. I also learned that our PP had been considered one of the best AID/Washington had ever received. When word of this got through to Ev Richardson at CSU, my status at the University greatly improved. While grateful for this news, I knew that I had received excellent support thanks to Rollo, Axel and many others. I had the advantage of knowing how to develop an economic analysis of the type acceptable to AID/Washington. The DGA with critical help from Paulet provided the underlying technology while Wendy and Janet covered areas I hadn't thought about.

While I thought my work in Peru had finished, I soon would be back in quite a different capacity. On one such return trip, I met Wineburg, Fowler's replacement at AID. Our conversation turned to *Plan Meris*. Being somewhat full of myself about the success of this effort, Wineburg brought me up short by saying the project had been terribly difficult to monitor. I responded, "At least it's a step in the right direction" to which he snapped, "My god, man. We're talking about 20 million dollars!"

On another trip in which CSU was looking to collaborate with the Peruvians on some activity I told my Peruvian counterpart that I had helped initiate *Plan Meris*. He responded saying that the project was not all that good. Another ego lesson. Oh, well. Before leaving Lima I checked in at the AID Mission just to say hello, I learned that Rollo had *decked* Director Wineburg for some reason, spent some time in the mental wing of a hospital, and had eventually found another AID assignment. Afterward, meeting him at the AID/Wash office we happily recalled our time working together. He had divorced Ginny, which was no surprise, and had remarried.

Chapter 10: Reprieved

I arrived back in Fort Collins Saturday, rested on Sunday, and went to the office Monday morning. The day had scarcely begun when I received a call from John Fischer (our original contact in Ethiopia). Now, he was part of CID's¹ central management with responsibility for activities in Asia and Africa. He wanted to know if I could backstop him on a conference soon to take place in Rawalpindi. This was to be a CENTO activity focusing on integrated rural development (IRD). I asked him what he wanted me to do, "Don't worry, I'll fill you in when we meet on our flight to Pakistan. If you can make it, we'll rendevous at John Dulles International Airport." Getting clearance from Fred, I arranged someone to take over my teaching responsibilities, packed, boarded a plane in Denver, and was on my way without *really* knowing what I was to do. Neither did I know much about Pakistan. A rather silly way of doing things, but at this stage in my career I was willing to take a lot of risks to establish myself.

I met John at Dulles as planned. After settling into our seats, ordering a drink, and eating dinner, John finally got around to telling me what he wanted me to do. John was the coordinator of a five-country conference on Integrated Rural Development—a popular topic at the time--sponsored by the Central Treaty Organization. The organization was established as part of the USA's and Britain's efforts to counter the potential intrusion of Russia into Iran, Turkey, and Pakistan, strong allies of the West at the time. IRD was thought to be one of ways to gain support from the rural areas, which in turn should lead to political stability there. IRD was just one of the many ways the USA and Britain sought to retain the cooperation of leaders in these countries. Supporting the military, however, was by far the most influential way of doing so.

Without batting an eye, John nonchalantly handed me a copy of a paper he had written for one of the meetings. He said he wanted me to deliver the paper *as though I had written it!* Explaining, he said that as conference chairman he feared that it would look as though he were dominating the sessions if he were to deliver a paper and monitor the sessions at the same time. His request unnerved me. Someone else could probably have handled the assignment easily. But I don't deliver papers easily to large audiences. As a result I spend considerable time in preparation. What John had asked me to do did not set well. But I kept this feeling to myself.

By the time I settled in to read John's paper, it was approaching midnight and we were somewhere over the Atlantic. The crew had turned down the lights so the passengers who wanted to do so could get some sleep. John could, and was soon breathing deeply. I turned on the small beacon light above my seat and settled in to see what John had written. It wasn't long before the shock hit me. John's paper was a mess! He must have jotted it down in a hurry before leaving Tucson. I soon concluded that no matter how well John could talk to a crowd, his words flowing deliberately and logically, that gift didn't carry over to his writing.

Not only that, but I had difficulty in *even understanding* what he wanted to say. I was stuck in having to rewrite the paper so it made sense to me and matched my way of speaking. By the time I got through the paper, we were landing in London just as light was coming through our plane's windows. Except for occasional moments of dozing, I had been up the whole night. Since our layover was several hours John arranged to rent a day room in an airport motel.

After a fitful rest we boarded our plane for Pakistan. En route I reread John's paper, made notes, and began to rewrite it. But my efficiency ebbed during our second day of travel. Eventually we landed in Islamabad early the next morning. A smoky haze hung over the road as we made the short trip to Rawalpindi, the old capital, and checked into the fancy Intercontinental Hotel. I had now been traveling 36 hours with only interrupted sleep on the plane and the

London layover. We were at opposite points on the earth; early morning here was early evening back home. I was dazed from the long trip and worried about presenting John's paper two days later. In contrast, John appeared to have weathered the two-day trip in good order. But then he wasn't the worrying kind.

After a quick breakfast we went to our rooms where I slept for six hours. I ate in the afternoon then returned to my room and the paper. I kept at it till 3:30 a.m. at which point I had run out of gas. But I couldn't sleep, it being mid-afternoon back home.

The next morning, John gave the welcoming speech to a large crowd in the hotel's conference room. I went to the AID office after lunch to draft my notes. Really bushed I went to bed without eating. Up at 1:00 a.m. to go over "my" paper; back to sleep at 4:00 a.m.; and gave it, which seemed to be received well enough. *Then*, I could relax. The crunch was over. As usual I made more of the event then need be—probably the modest level of effort that John had intended when he asked for my support. I was basically an observer during the next two days. Being off the hook, I left the hotel to walk around, as I'm want to do to relax and to explore my surroundings. What struck me most were the tall eucalyptus along the streets, which I found pleasant, and the hazy, smoked-filled air, which lent an air of mystery to the place.

What I came away with from the conference was how much the Turks looked and acted like "country cousins," pleasant, but unpolished. The Iranians were the opposite, smooth, well prepared, and focused. (The Shaw of Iran, Mohammad Reza Shah Pahlavi, was still in command.) The word went around that this effort at rural development was aimed at pacifying Iran's many farmers and villagers. During one of our lunch-time breaks, I ended up sitting at a table at the Athletic Club as the only American among five Iranians, all nattily dressed in black suits and ties over spotless white shirts. I found the Pakistanis somewhere in between these other two. Some spoke well at the conference, but the others impressed me by

their argumentativeness. Members of the same Pakistani team would argue among themselves, sometimes going off subject and blocking others' comments while also eating up lots of time. Still, they were a pleasant sort.

The conference ended with a field trip to visit some of the local farmer cooperatives. Again, John was in his element, since he had loads of experience with such organizations. The next day, John and I headed home. This time, I found the trip comforting, using the long hours in-flight to catch up on my sleep. By the time I reached home, I was well rested and ready to return to the classroom. The trip made it possible to carve another notch in the handle of my experience. Beside, it was good to be able to collaborate with John beyond Ethiopia. Before long, he had replaced Anderson as CID's Executive Director.

I now settled into my normal routine at CSU: teaching, advising students, the solar energy project, and other professional activities. A year later, in January1976 Ev Richardson told me about an assignment for me in Honduras. Gaining clearance from Fred I worked late getting ready for my departure. I packed then catnapped till 1:30 a.m., drove to Denver, then boarded the plane for New Orleans at 4:00 for a five-week assignment in Honduras. I slept most of the way, awaking when our plane was about to land. I had been half asleep when I noted the change in the plane's sound and speed just in time to feel the sharp bank to the right. Looking out the window I saw residential buildings both below and out the opposite window. The single runway, nestled in a small valley well inside city limits is short and slopes downward, hardly standard for international flights. With feathered engines we made a soft landing, but not far from the cliff above a major freeway below.

In time, after several trips to Honduras, I was to hear a story about a landing during a heavy downpour. Knowing something had to be done to keep the plane from plunging onto the freeway, the pilot threw the plane into a "ground loop" which spun the plane to a stop while keeping it upright. Then the flight crew opened the emergency doors that activated the chutes leading to the ground. The

American Ambassador who was on the flight froze in the doorway. Someone had to shove him to clear the way so that the others could jump into the excavation chute. I don't know if the story that was going around is true, but it does convey the excitement of landing in Tegucigalpa. Without anyone meeting me, I grabbed a cab and checked into the Maya Hotel as I had been advised to do. The motif was Mayan, as one would expect given its name. Off to one side was a large swimming pool that overlooked a broad ravine in which a major avenue led to the center of the city.

The next morning I called AID and talked with Ray Solem, who was to be my contact for my assignment. Ray looked to be 35, a handsome guy, over six-feet tall, athletic, with a friendly, easy smile. Ray explained the nature of the project that needed my input. A major valley in northern¹ Honduras received the brunt of Hurricane Fifi, which had buffeted the country two years earlier. This was reportedly the worst natural disaster ever to have affected the country. The strong winds accompanied by heavy rains caused major landslides and other damage resulting in a death toll of 10,000. The US government's objective in responding to Honduras' dire straights was to demonstrate its concern and reinforce the friendly relations between our two countries. Other than a focus on irrigation, roads, and agriculture, the nature of our project was wide open.

The opulence of the Maya overwhelmed me, given the limited per diem that normally accompanies AID-funded consultancies. So, the next day I checked out and moved to the modest, Ronda Hotel, several blocks over in the commercial district. Sometime after midnight I felt my bed begin to roll gently. Seemed like an earthquake. But how could this be? Flying into Tegucigalpa I had read an in-flight magazine that said that the country had never experienced a major earthquake. So I rolled over and went back to sleep. The next morning to my surprise the headlines of the local newspaper showed pictures of the devastation in

¹ This part of Central America runs east-west, so that the northern part of Honduras faces the Gulf of Mexico and the country's brief contact with the Pacific faces south.

Guatemala from a 7.5 earthquake centered about 100 miles northeast of Guatemala City. A day later, I moved back to the Maya, after Ray had talked to the manager into giving me a reduced rate for one of the small rooms along an open corridor close to the pool. Not a fancy room, but I had full access to the luxuries the hotel had to offer.

AID's missions around the world are anything but monolithic. So, it didn't surprised me that the approach I had followed so successfully in Peru did not carry over to Honduras. In fact, it couldn't have been more different. Ray was laid back, Rollo Erich was intense. Ray had made no effort to have me work with one of the agricultural or planning agencies. When I asked Ray whom within the Honduran government I would be working, he said it didn't matter. He and I would develop a project and the Honduran government would accept whatever we came up with. Probably the root cause of this difference in attitude, from the one in Peru, was that AID funding in Honduras was a grant. Ray seemed so secure in his job that the success or failure of our efforts would not threaten his status. Moreover, he figured he knew what needed to be done, which wasn't much. Consequently, he found that my ideas about a rigorous benefit-cost approach wouldn't be needed to get the proposal approved by AID/Wash. In time, he was to tell me that his wife's father was the US Ambassador to NATO. With all this supposed security Ray showed more interest in his pet idea, which was to develop a disposable, plastic disc that would show the exchange rates of the countries around the world most visited by American tourists. If he could patent the idea and persuade US travel agencies to pass one of these out with its sale of an international ticket, he could make a fortune. He talked as much about this idea as he did about our project.

The differences affected my work greatly. During the first few days, Ray sloughed me off to others within the AID mission who could fill me in on Honduran agriculture and what could help the situation. The Agriculture Officer who was an old hand with AID told me a lot about the country's agriculture, the devastated areas, and the names of a few Hondurans in agriculture. But our project

was beyond his area of responsibility—or concern. Likewise, those within the Government whom I met were courteous, but appeared not to be involved. Eventually Ray introduced me to Frank Kimball, the AID Director. Little came from this meeting other than having Kimball say that the proposed project was not due for approval in Washington for three months and that he would set up a committee to assist Ray in drafting it. So, I was off the hook. My final report could contain inputs for this report, rather than being a draft of a report to AID/Wash.

When Ray finally got around to saying what he needed from me, he brought out AID/Wash's guidelines for submitting projects for funding, which included the Log Frame. On the surface the procedures of the Log Frame seem to make sense. But the process breaks down, as had been my experience, when I had to justify *each input* on how it affected the project's targets and goals. Logical? Yes. But practical? No.

With the pressure off, I was free enough to go to a few movies, a Shakespearean play, church on Sundays followed by pool side barbecues, a few cocktail parties thrown by Ray and his wife, and to swam during the 90-minute lunch break. Adding to the above pleasantness, I joined AID staff for a three-day weekend trip to Roatan, a small island just off the north coast. This was Ray's idea, which I readily accepted. How I got there was somewhat of an adventure. At the end of the week, I had been visiting farmer locations east of San Pedro Sula, the country's second largest city. Around noon, I caught a local bus going east along the coast. My destination was La Ceiba, 50 miles away, where I would catch a small commuter plane to make the short hop to the island. The bus ride was something else. It was filled with locals who piled produce and other items on the buses' roof. But the women, who cared for the chickens, brought them inside. The driver stopped every few miles to let passengers off and others on. So, while the distance was short, the ride took a couple of hours.

Even so, I arrived at the airport in plenty of time. The airport in La Ceiba was clean and modern. I bought my ticket and waited for the flight. I waited and waited. So, while waiting I decided to meditate, which lasted only about 20 minutes at a time. I had begun meditating about a year earlier after having read about Maharishi's Transcendental Meditation on a couple of domestic flights. (I had never bought into the idea of sending money to the Maharishi so that his organization could select my own personal mantra.) Instead, I checked out articles written by credible medical scientists and found that the practice yielded a beneficially altered state of mind. Later, while practicing at odd times, I could feel the relaxing effect even though I had only been at it for about a year. Apparently, this was not enough because it didn't work when I was stressed.

Around 7:00 p.m. an announcement came over the loudspeaker that the plane had been cancelled. Before I had time to figure out what to do, a middle-aged man came up to me, said he was an American, and thought I looked like one too. He wondered if I would like to join him and his wife for dinner. I accepted and rode with him to his farm several miles from town. After dinner, which was served on their screened-in porch they told me about coming to Honduras many years earlier and their peaceful, farm life since then. One of his interests was to take coconut husks, strip off the shell, and treat the fiber for use as a soil conditioner. I told him I thought the idea had possibilities, but could offer no particular advice. Eventually, he drove me back to a hotel for the night. The next morning I boarded a small plane for the uneventful flight to the island. Except for the landing. The single landing strip was so short that the pilot used up the entire length before he could stop.

At one of Ray's parties, I told him about an incident that happened to me on my way back to the hotel. Walking up the steep hill close to the Maya, I was tired from the day's interviews, and deeply in thought. Without realizing it, I found myself focusing on the calves of a young lady just in front of me. So absorbed, I felt a slight brush against my left arm. Turning around, I found an elderly fellow dressed in work clothes staring at me. So, I apologized and started on my way.

But then, his eyes showed emotion as he pointed to the red liquid that had poured out of a small, broken bottle. He said in Spanish, "Look! You have caused me to drop this bottle of medicine. It was for my wife. I have no money to replace it" Recovering, feeling sorry for him and acknowledging (to myself) that it was my fault, I asked, "How much would it cost to replace?" He told me an amount that was equivalent of five dollars. So I pealed out the lempiras and gave them to him. Hearing the story, Ray said, "Aha, so he got you too!" Seems as though this fellow was well known for "working" the tourists. And here I thought I had learned enough in Ethiopia to protect myself from con-artists like this one.

While enjoying myself in the above ways, I took seriously my assignment. I spent the last week writing my report, which I gave to Ray. Other than a courtesy visit with the Deputy Aid Director, I had no meaningful sessions with those above Ray's level. Nor did Ray think it necessary for me to sign off with the Honduran officials. He would write the report and make the necessary presentations himself. Not being responsible to the PID that Ray would write, I wrote about the economic background (typical of the World Bank approach), the Log-Frame, organizations, training, a pilot project in irrigation, and my thoughts on the need for a road study for Obras Publicas because so many had been damaged by the hurricane, and the procedures of benefit-cost analysis. I finished all this after midnight on my last night in Tegus. The next morning Ray drove me to the airport. This had not been a rewarding assignment, just an interesting experience.

For my return trip home, I had arranged to stop in Guatemala City so that I might become familiar with the activities of AID's ROCAP (Regional Office for Central America and Panama). What caught my attention during trips around town in AID vehicles were the fully-loaded submachine guns the two guards carried as protection for our driver and me. The next day I met Bill Gamalero for brunch in a restaurant close to where he worked. During our meal, an aftershock of perhaps 5.5 shook the multi-story building we were in. Theses aftershocks had continued for over a month. We remained seated but I noticed Bill looking at the beams supporting the ceiling above us. In his typical self-deprecating way, Bill joked that

during all his years in the construction business he had hoped to get rich helping to rebuild the City after a major quake. But now that it actually had happened, he couldn't take advantage of it because he didn't have the materials he needed to bid on the contracts. Hard to tell whether he was telling the truth or just joking.

Three weeks later, I was part of a four-man team headed for Egypt for a month. Ev had asked me to join him, Bill Schmehl, and Wayne Clyma to put together a large project focused on the Nile. The USA, in the process of encouraging cooperation between Egypt and Israel, wanted to use its AID program to demonstrate its commitment. Unlike other projects, AID wanted this effort to be big. Thus we were asked not to skimp on costs. Ev would cover irrigation structures and their operation and maintenance, Bill would cover irrigated agriculture, Wayne would cover irrigation practices, and I would cover AID procedures for project design and approval. Bill and I had collaborated in various ways and so knew each others' approaches. But this was the first time I had worked directly with Ev or Wayne. Ev's ideas surprised me because he focused on introducing modern practices, which I thought overlooked the differences between modern and developing countries. And I soon was offended by Wayne's narrow focus in irrigated agriculture. He exhibited this during our first visit to observe irrigation practices on farmers' fields, which typically total no more than one acre divided into small plots. Right off the bat, Wayne steps out of our vehicle and walks over to a farmer in his field and asks him through a translator, "Do you know how much water you apply and if so, how much? Then he immediately charges that the farmer is using too much water. Without even hearing the details. Wayne had spent lots of time in the field in Pakistan where he had concluded that that was the major irrigation problem there. This was his message without even understanding the situation on the ground. This was so unscientific to my way of thinking that we never did see eye-to-eye . . . even though he might have been right occasionally. What made the situation worse was that Ev bought into Wayne's "philosophy" about the excessive use of water. Under conditions of certainty Wayne's position might have been correct. But when conditions are *uncertain* the

safest course for a small farmer could be to take all the water he can when he has the chance to do so.

I was able to put the relevant information together in a way acceptable to AID for the Project Identification Document and later the Project Paper. Eventually, CSU won the contract to administer the long-term project that resulted. I remained out of the loop, which was just as well, except for subsequent outsider reviews of CSU's progress.

In July I participated in a training course in Lima along with three of CSU's heavy weights: Daryl Simons, Warren Hall, and Vujica Yevjevich. I gave my standard bit on benefit-cost analysis, while they focused on their specialties. Over a two-week period we lectured half days and met those in the Ministry's Civil Engineering Dept the other half. Pepe Salas, a member of the Dept, was soon to join CSU as a tenured professor. I thought this connection was what had led to the appointment. What I hadn't know was that Pepe had received his master's in hydraulics and PhD in hydrology at CSU. Consequently, he knew Simons and Yevjevich, and he certainly must have know about Hall's reputation.

In October Ev arranged for me to attend an OECD² conference in Paris. The conference was held at its chateau just down the street from the Arch de Triumph at the top of the Champs Elysées I'm unsure why Ev asked me to attend, perhaps as a way to expand CSU's presence on the international scene. However, the atmosphere and surroundings overwhelmed me. Those who chaired the sessions were erudite possessing "old-world" charm. Some Count opened the proceedings. Martin Brown, whose name I had heard beforehand, talked about research possibilities; another talked about innovation as an aid to development, and still another talked about water resources planning. Perhaps Ev knew about this last topic was on the agenda. I talked with two guys from AID about my work in project analysis, and water resources planning. All these during session breaks. My only input came when I spoke out about the "time-value of money." A nice *technical* concept that seemed dwarfed by the more grandiose ideas being discussed.

² Organization for Cooperation and Development, a European entity headquartered in Paris.

Aside from the occasional encounters just mentioned, I was by myself. During the breaks for lunch I would stroll a couple of blocks to a park where I bought a few things from a street vendor. At the time I could not keep straight whether what I was ordering was hot (chaud), as with a hotdog, or cold (froid) as with a ham sandwich. Another time I thought I'd try a local restaurant. So, strolling over to a part of town with such places where I followed what looked like three young executives. Following them into a restaurant I was finally shown to a seat in a corner of a dimly lit room. Fearing I might spend too much money I ordered a cup of soup and a side dish. Knowing I was an American, the waiter said in clear English. Monsieur, you must order at least three dishes. And so I did. Another time shortly after my arrival, I entered what might come close to a fast food place and ordered a steak without specifying how I wanted it cooked. The size and price were right, but it was the rarest piece of meat I have ever eaten. Blood just oozed from the steak as I cut into it. By the third morning I had found a nicely appointed coffee house on the Champs where I tried their café-lait and pastry. This was expensive by most standards, but delicious and within my budget. Besides, I liked the atmosphere.

The morning I left while waiting to be picked up for my trip to the airport, my eyes rested on an elderly couple. The husband (had to be) appeared to have a terrible cold because he kept coughing and clearing his throat. The unsympathetic wife (had to be) scolded hm severely saying, "Will you just stop that; you're so vulgar!" At that point, my ride had arrived. All told, I appreciated the opportunity to spend a week in Paris and to sit in on a conference. But I left feeling I had been out of my league.

In January Robert Havener of the Ford Foundation called asking me to come to their offices in NYC about a resident position in India. Stanford had given him my name. The interview started out well, but ended with an air of indifference after I said my engineering skills were rusty and expressing my concern about losing tenure at CSU. To which he retorted, "My god man after a position with Ford, you wouldn't have to worry about tenure!" But then I ran into Clive Gray, which could have squelched any opportunity I might have had. But there was another factor. While I liked the idea of working in India, because it is so rich in the development literature, Vicky never liked the idea of living there. Besides, it would have been rough on our kids to take them overseas again after such a short time in the States. In any case, I didn't get the job.

In March I flew to Lima to help Jim Stone of AID put together a farm-to-market roads project in the Tarapota area in the Northeastern part of the country. (During our first meeting I might have talked about my dissertation about penetration roads, not the type being considered here.) But the linkage between increased farm projection and rural roads was still valid. The idea was to open up an area in the so-called *ceja de la selva* (eyebrow of the jungle) east of the Andes and west of the Amazon basin. The area was largely undeveloped, contained suitable climate, abundant area for a wide range of agricultural crops and livestock, and served by a good major road network. With me on my flight to Lima were Axel and his family. Putting his dissertation on hold he was returning to Lima to become general manager of Aguas, the position Lostao had held. That decision ended his chances for a PhD, something he had come to regret.

After the usual briefings, Stone, an anthropologist whom I hadn't met before, and I fly to the area to look at the area. Stone had scheduled a flight in a four-passenger Cessna to fly over the target area. The next morning, after a rainy night, we awoke to a partly cloudy sky that alternated between showers and sunshine. But even with the sun out, the mountainous area over which we were to fly contained clouds enclosing most of the hills. We were undecided about what to do, so decided to drive to the airport to ask the pilot whether he thought it safe to fly. When we got there we saw a small shack, a maintenance shed, a fuel pump, a single runway, and a few planes parked outside. It was a stretch to call this an airfield. We asked where we could find the pilot and were told to go to the shack. When we got there we found no pilot, only a young Peruvian who looked to be only nineteen dressed in oily overalls wiping down the side of the plane. We approached him and asked if he could tell us where the pilot was. To our amazement he said that *he* was the pilot.

After we recovering from the shock, we asked him if the weather was going to clear, and, if it did, would we be able to fly over the area we wanted to see. He said he didn't know if the weather would clear or not but in either case was prepared to fly us over the area if we liked. Hemming and having awhile we

finally decided to risk it. Once in the air we wished we hadn't because patches of rain clouds had settled into the valleys and up the hillsides. Still the pilot skillfully wove in and out of clouds so that we ended up with an excellent view of the area's potential, which would have been impossible from the ground. We stayed in the air for perhaps two hours. Needless to say we were relieved when we landed safely.

Our field work completed we flew back to Lima the next day. I worked on my notes and ideas for the report till 3:00 a.m. Tired, but not exhausted, I met with Jim in his office the following afternoon. To my relief, he said I could send him my report. Otherwise, I would have to change my travel plans. Two days before my return home, I heard a loud commotion in the streets below the room where I was staying. Peru's soccer team had just qualified for the World Cup. A parade of cars streamed along the street below, horns honking, streamers flying, and joyous people flooding the streets. The World Cup means so much more to the people of the many countries whose teams compete. The major difference between the World Cup and the major sporting events we have in the States is that the whole country supports their team.

The next day was Sunday and the Lostaos and Dourojeannis headed for Lostaos' small beach cabin north of Lima. We swam in the ocean, lounged around the pool, drank a beer or two, and ate the snacks that Poacha and Carmen had prepared. The day was pleasant, the wind off the ocean kept us from feeling too hot with the sun hidden behind a thin cover of clouds. Without realizing it, I had been exposed to far too much sun. By late afternoon I began to feel a slight warmth on my chest, stomach, legs, and feet. By six o'clock, the warmth turned to a burning sensation, my head began to ache, and I got the chills. I was severely burned over a large part of my body. Later, I caught the midnight flight home, which was uncomfortable to say the least. And for days afterwards I had difficulty walking, climbing stairs, or otherwise exerting myself. Eventually I got over it. But I had learned a lesson. I don't know what happened to our study, since Stone never got back to me.

In December Ev told me he was going to recommend me as the Deputy Director of CID. This came after Gil Corey of AID/Wash had called Ev to say he appreciated my help in Peru. I think Gil had taken a sabbatical from CSU to work with AID, which might explain how I got the Peruvian assignment. As Deputy Director, I would be one of only three officers, the other two being the Executive Director and the Treasurer, held by Larry White. Both were employed by Utah State Univ. Somewhere I had heard that Darrell Simons and Donal Johnson, CSU's Dean of Agriculture and CID's current Chairman of the Board, wanted to break up this Mormon "mafia". Bruce had an incurable disease that caused him to have constant diarrhea. My appointment, if successful, was simply paving the way for the time when Bruce would have to retire. Bruce and Larry had been running CID since its inception. Moreover, Bruce was noted in the irrigation field, having extensive experience in Iran, as well as being past president of the National Association of State Universities and Land Grant Colleges (NASULGC).

As CSU's candidate I had to compete with others seeking the job. So, in February 1977 Vicky and I flew to San Francisco to met with the Selection Committee. En route to Oakland, where the interviews were being held, I spilled coffee on my lap, which must have reeked as sometimes happened. Even worse, last year I had scored my first and only hole-in-one on the fifth hole of our Country Club. This was the longest par three on the course, so making it there meant something. We phoned this into the Pro Shop, which in turn spread the news locally and beyond. To our surprise, our family made national news—TV and radio. None of us saw or heard the reference, but friends told us about it. Someone had picked up the story that five of the six in our family had had a hole in one during the same year. Becky, of course, wasn't involved because she didn't play golf. So the story that came out "all in the family save one, and she doesn't play golf." This was during the time of Archy Bunker, which accounts for the "all in the family" bit. So on our way to my interview, I was embarrassed by the publicity. I didn't want to become known because of my golfing ability, for as

Jack Dalton had said after following my match play with Tony Payne in Addis that I was either a gifted golfer . . . or spent too much time playing the game.

Notwithstanding, my interview with Donal, Bruce, and two others went well enough for me to get the job. I was pleased to learn that Roger Ernst had written a letter of recommendation. So, now that I was beginning to feel comfortable in my job, I was about to take on another career change. That evening Vicky and I celebrated by eating at a fancy restaurant in San Francisco and attending a play in the Theater District a few blocks from the apartment where I used to live.

Two months later Vicky and I flew to Logan, Utah to discuss details of our move there. Most was just general stuff. We had already settled on my salary, which included a modest increase. But more importantly, it moved me to a full twelve-month basis, unlike the nine-month funding given most of the faculty. White was supposed to have attended my meeting with Bruce, but he didn't show up. Eventually, he came in after Bruce and I had finished saying that he had run off the road, hit a mailbox, and had to report the accident. Possibly yes, possibly no. If no, this was the first indication of future trouble.

Afterwards I met with Ev and Simons who both told me stay on CSU payroll. Clyma tells me what CID ought to do! So does Jud Harper, Dept Head of Agricultural Engineering, with its strong irrigation program. And Yevjavich talks about the need for a conference on droughts. And I have lunch with Skogerboe, an Ag Engineer formerly of USU. Seems I had gotten their attention, mainly because funding is a big thing at CSU, and CID can produce a lot of it through its many AID- funded contracts.

Vicky and I looked at housing. Earlier, Vicky had said she wanted to sell our home in Ft Collins, that if I was going to make the move, I should do so with the intent of staying. I wasn't so sure. But we had bought a lot on the golf course and could build on that if we decided to return to Ft Collins. So, we were looking for something to buy. We found a nice ranch-style place on the "bench"--the high

area of the city, near the mountains about a mile from the University and CID headquarters. Back in Ft Collins, Vicky and I begin cleaning up the house and yard ready to put it up for sale. No one showed up for our first Open House, but eventually we sell to Bev and Dick Loehrke, a fellow ME prof. Finally, we are ready to move. The packers show up on July 18 and the next day we load up our car and make the ten-hour trip through Wyoming and into Utah, thence to Logan.

Within two weeks of being accepted for the CID position, and knowing we would be leaving Ft Collins, Mom has a stroke early one morning. We had dropped in to see Mom and Dad after early morning church. Dad opened the door, a worried look on his face. He sais, "Mom is in bed and I can't get her up." Once at her bedside we find her shaking and unable to talk. For some reason we didn't think to call 911. But instead we helped her to our car and made the short drive to Emergency at Poudre Hospital. The doctors diagnosed her immediately as having a major stroke.

Dr. Hillard moved Mom in and out of the hospital so as to extend her medical coverage in a nursing home. Implying that she's terminal, Dr. Hillard says he just wanted to make her comfortable. She couldn't communicate vocally, but could show her discomfort or frustration by knitting her brow. She did perk up when given oxygen. Dad was rightfully upset, staying at her bedside for long periods at a time. I stay around as long as I could, but by the first of June I felt it was time for me to go to Logan. Mom died peacefully on June 16th, just ten days after her 81st birthday. Vicky, Dad, and Dr. Hillard had all been to see her an hour earlier.

While the foregoing is a linear account that ends in our move to CID headquarters in Logan, I had been busy at CSU in other ways. Even though feeling much more secure in my position, I kept putting in the long hours including evenings and weekends. I still had tenure to worry about. It was still a demanding a life. Sometimes I worked till 3:00 a.m. At other times I would set the alarm for 4:30 or 5:00 so as to get an early start on the day. Even so, I found

time to go skiing with the family, watch the boys play baseball and football, play bridge, and go out with Vicky at some fine restaurant. At least now, I no longer worried about staying with CSU. By mid-January Smith told me that I would be staying, even though he didn't think I contributed much to the Department! I never checked as to why this change of heart, although Ev and Simons must have put the pressure on him.

As hard as I tried I never was able to pull off the approach Smith had suggested. I had built a suitable niche at CSU, with my abilities and interest in project analysis applied to third-world countries. My Projects Planning course was finally dignified as ME610, mainly because I attracted so many graduate students. But instead of getting funding for work in this area, the only funding I got was for *my services*. But then, Smith hadn't dealt with someone like me before.

Interspersed among the activities not already described were assignments in Pakistan, Egypt, and Peru, this time working directly for Lostao. I continued teaching and advising graduate students, stayed involved with solar energy, and searched for funding, struggled to get published, and otherwise establish myself professionally. Nobe helped my status within CSU by offering me a joint appointment with Ag Econ where he was Dept Head. By then I had been a regular in teaching short courses to students enrolled in the Ag Econ Dept. I continued teaching Engineering Economy (ME410) as literally "my course." I once taught a followup course called Capital Budgeting (ME510), which Duff usually taught, and, of course ME610. Warren Hall and Maury Albertson encouraged their graduates, with such interests, to sign up for the latter course, as did Axel and Pixie Ross.

The course that challenged me the most was the one I taught freshmen mechanical engineers. I had been away from some of the topics since my freshman year at Iowa State 40 years ago! While uncomfortable, I was glad that the Fred would trust me with this group of students most of whom planned to continue in mechanical engineering. Had I bombed out, the crop of sophomores the next year

would show a marked decline that could be laid at my feet. I had always been comfortable with descriptive geometry, so that would not be a problem. But teaching Fortran was different, since I was unfamiliar with this computer language, although I had learned Balgol and Algol at Stanford. But I survived by attending the course taught by the Computer Dept in the morning and teaching what I had learned to my class in the afternoon. And I taught about product design, drafting, material take-offs, and cost estimating. Adding to the practical side I had the students go through the foregoing by designing a yard sprinkler. Not inspiring, but practical. I sometimes wondered what these students thought of my teaching. So, I was caught off guard when a representative of the student chapter of Tau Beta Pi asked me if I would be their advisor. My move to Utah preempted that possibility.

Besides teaching, I also worked with a lot of grad students, many of whom were from foreign countries, including Axel. Others came to me because of their association with Becky while in the Peace Corps. I advised and served on the committees of those from India, the Philippines, Nigeria, Tanzania, Thailand, Brazil, and Peru (other than Axel). Some of them were the brightest of students. One was a Nigerian who like Mat Altenhoefen (of Stanford) solved routine engineering formulae using "first principles." Though not many I was committee chairman for three PhD students in Mechanical Engineering. These were Ali Firouzi of Azerbyjan, Ali-Bin Ali of Qatar, and Tom Sheng an American of Taiwanese descent. In time, Tom and I were to be close friends as well as professional colleagues.

I continued working with Duff and Sandy on CSU's part of the solar energy program directed by Skook Karaki at CSU and under the overall leadership of George Löf of Colorado Univ. I did this for the coverage, not as a field of my interest. This involvement led me to collaborate with Harry Wilson of Westinghouse/ Pittsburgh on solar panel design and cost while Duff ran the optimization routines. The three of us eventually wrote about our findings, which were readily accepted in credible, refereed journals. The ones that Fred Smith wanted me to write. Although necessary and successful as groundbreaking work

in a new field, the work behind them were of little interest to me. During this time Tom Sheng was working under my direction in writing computer programs for Skook, who asked me to continue with CSU's efforts in solar energy and I accept just to have the funding. Duff and I submitted another paper on our work, which was accepted for presentation at a Solar Energy conference in San Francisco. Little came from this lengthy and expensive study because the conversion of solar to electrical energy requires dependability. The latter can be provided by conventional, backup facilities. But this reduces any cost advantage solar might have. Storage in high-capacity batteries weren't practicable then, or even now. However, solar voltaics have since become popular because of the great decrease in the cost of in their production.

I remained singularly unsuccessful in the search for program funds, other than those covering the costs of my employment. What eventually happened were the large projects that I was to lead. In this way I did bring in funds to CSU via the ME Dept, which Fred eventually considered as a valid substitute for the program approach he had outlined for me.

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6/19/17

Chapter 11 Consortium for International Development

Bruce Anderson met me at the small, Logan airport. We drove the short distance to the CID offices in the tower building on the Utah State Univ campus. Bruce said he wanted me to liaise with the lead universities concerning their technical responsibilities for CID projects and to troubleshoot when needed. That would relieve him and Larry White of this responsibility. Larry would continue to handle CID finances and contracts, and he, Bruce, would focus on CID policy as set down by the Board of Trustees and be responsible for overall administration. Jim Wood would help me as needed and would continue to look over any training components associated with CID projects. He told me about the various CID contracts, which were nearly all AID funded in Iran, Honduras, and elsewhere. After work I walked past the house we hoped to buy, drove to Logan's small business district to get something to eat, then went to bed. It had been a long day.

I returned to Ft Collins the next week to help Vicky get our house ready for sale. We prepare the house and yard for an open-house the coming weekend. By Sunday, no one had showed up. What a blow. The next day, I returned to Logan to delve more seriously into my new job. But that was soon disrupted on May 16th, when Vicky called that Mom had died at 6:15 p.m. Vicky, Dad, and Dr. Hillard had been there about an hour earlier. She just sighed and died. Apparently without pain. She had gone down hill since I was there and was being fed with a syringe.

Shortly before then Paulo, a Brazilian kid of sixteen, came to us literally out of the blue. One Sunday, the phone rang and the male voice on the line asked in broken English to talk to "Teem." After he hung up, Tim said that Paulo, one of his Brazilian friends, asked him to pick him up at the airport—as though this were a ten-minute drive. Tim said he didn't know what to make of it. Although when Tim left Brazil he had expressed his gratitude for those who had befriended him by saying, "You're welcome to come visit me in the States." Apparently, Paulo took him up on the offer without bothering to inform him ahead of time.

Once the two of them returned we learned that Paulo planned to stay through his junior year! Catching our breath, Vicky and I said, "Sure. You can stay with us." Now that it became clear that we were moving to Logan, we offered him a choice. He could come with us to Logan or we could find someone in Ft Collins to look after him. He chose to come with us. Paulo's situation was different from the exchange students who come to this country. For them, a sponsor agrees to accept one of our students during the time that one of theirs is living here. Service organizations, such as the Rotary or Kiwanis, generally arrange for the airfare and miscellaneous expenses in exchange for the benefits our students receive. Paulo had none of this. He, or his family, had simply paid his travel expenses and provided a monthly allowance, unknown to us at the time.

Eventually, Bev and Dick Loehrke, a member of our ME Department, showed interest in our house. Dick's major concern was the distance to the campus—five miles away, compared with the minutes where they were currently living. I told Dick that the drive was not long with little traffic, so that he could get there in a quarter hour. He bought into my argument and paid close to our asking price. Since then, Dick and Bev have said they never regretted buying our house. Now we had the funds to buy the Baugh's house—the brick, ranch house that had caught our eye in Logan. After arranging for a small loan to cover the \$20,000 above the money we had received from the sale of our house, we closed the deal. Returning to Ft Collins Vicky and I, with some help from Mike, Paul, and Paulo made the finishing touches and took our "junk" to the dump. We all spent that night with the Zelle's. Eve had worked on Vicky's committee when she was president of the CSU Women's Association and I had gotten to know Max, head of the radio-biological department at CSU, through golf and bridge. On July 19th we loaded the car and made the nine-hour drive to Logan.

While all this was going on, I received a letter saying that I had passed the Professional Engineers' exam with a modest score of 75, not good but good enough. Strange in taking the test, I steered away from engineering economy. Some of the questions related to public utilities puzzled me. Perhaps I knew the subject too well. So instead, the topics I chose related to hydraulics and computer science. Now, I could add PE to my resume, although I doubted if I would ever make use of it.

Once in Logan, Vicky enrolled Mike and Paul in High School without problem. Getting Paulo enrolled was something else. At sixteen, Paulo did not look like his classmates of that age. He was tall, strong, and had a dark beard that required frequent shaving. By contrast,

Mike who was the same age as Paulo didn't even have fuzz on his face. School officials wondered if Paulo were not years older than he claimed to be. Another problem was Paulo's English, which he spoke only haltingly. At one point, Vicky told Paulo that he either had to become better in English or he would have to put up with her fractured Spanish. But Paulo was a quick learner, being in constant contact with Mike and Paul, which let Vicky off the hook.

As a student without being part of a student-exchange program, the tuition would be steep. But, the school advisor told Vicky, if she would become Paulo's legal guardian, then Paulo would be considered as any other Logan resident. So, together, we agreed to take on this responsibility. Vicky then took Paulo to Salt Lake City to fill out the necessary paper work. This solved one problem, but was to lead to another one later on.

The other problem occurred at Christmas time when Paulo drove into our driveway with a car he had purchased across the boarder in Wyoming. When Vicky questioned him, he said that some of his Brazilian friends at the University had driven him to Wyoming, where he obtained a drivers' license. With license in hand he then went to a used car dealer to make his purchase. When I arrived home from work, Vicky said, "You've got to talk with Paulo. Maybe he'll listen to you." Paulo seemed unconcerned. So what else is new? He said he falsified his papers and the sheriff authorized his license after taking a small bribe in the process. "That's the way it is done. Isn't it? We do as much in Brazil." "No it's not," we both said. Besides, it's illegal. And besides, Vicky said. "I'm your legal guardian. If you have an accident and charges are brought against you, we are the ones who will have to pay. You cannot keep the car." From there, we got on the phone, told the car dealer that he had sold a car to a minor without our authorization and that he should refund Paulo his money. Or we would file charges. He agreed and that was that. But before that I had to get serious with Paulo before he would agree to give up the car. Outside of that, we had no problems with Paulo. In fact, we enjoyed having him as part of our household, with Mike and Paul treating him as a brother. We didn't know how much Paulo was able to learn during the year he spent in school. His English at the outset was limited, but greatly improved at the end of the school term. By then, he was off for a tour of Europe.

Once ensconced in my new position with CID, I set out to learn more about my associates. Bruce, the principal officer of CID's Executive Office, had held that position since the beginning. Since the members of the Board of Trustees tended to rotate, newcomers to the Board usually relied on Bruce's historical knowledge of CID and his managerial skills. And he was known and respected among the community of irrigation engineers and extended his professional activities to other groups, such as the National Association of State Universities and Land Grant (NASUL)colleges.

Larry White kept a keen eye on the inflow of monies resulting from CID contracts and controlled their outflow— all within the rules and regulations set up between the Executive Office and the universities taking the leading role in implementing CID contracts. I have heard the saying, "He who controls the purse strings is the one in control." Larry knew this and was not hesitant to apply it. Besides the power that derives from such control, I was soon to find a sinister side to Larry's character. It wasn't long after I arrived that Larry called me into his office to explain how he thought I might fit into their ongoing operations. In doing so, he began a diatribe against Bruce, how he wasn't doing his job, couldn't be trusted, and was difficult to work with. After awhile, I told him that I wasn't interested in this type of discussion to which he responded, "You are either with me or against me." From then on, I felt he would try to undercut my performance as he did Bruce's.

Although Larry could put on a showy front, he was sometimes more talk than action. After I had been with CID awhile, the story surfaced about how he had flown to Saudi Arabia to negotiate a contract, panicked never leaving the airport, and flew back home without seeing anyone!

Jim Wood was the only other senior staff member. Jim was not an officer, nor in line to be one. I learned that he was an extension agronomist without a doctorate and may not have been even a tenured professor. However, his considerable overseas experience made him a valuable resource, especially for CID's occasional training programs. I soon found Jim to be delightful to be around. He was friendly, hard working, and went out of his way to help me as much as he could—both during work and beyond.

The other important member of our small group was Evelyn, the Executive Secretary. She reported primarily to Bruce; but Larry made use of her ample secretarial skills as well. Besides typing letters and documents, arranging for our trips, and other secretarial duties, she would scan the Daily Commerce Journal for project opportunities. She was not alone in her search, since those at CID universities would do the same.

Evelyn was in her mid-thirties, pleasantly plump, efficient, willing to help, and divorced. The divorce surprised me because I had heard so much about how the Mormons valued family life. She said she couldn't put up with her husband "kicking" her around. What I was to learn later was that the pressure on these wives was considerable. To begin, girls were encouraged to marry early, often after their boyfriend had completed his two-year mission. They were encouraged to have large families. And to be the "perfect" wife and mother, being active in the church and related social events, and keeping the house impeccably clean. Many wives could not stand up to this pressure so that the divorce rate among Mormons was comparable to the national average. Often, Larry would call Evelyn into his office, close the door, and talk for hours. I could only assume he used her as a sounding board for his dissatisfaction with Bruce. In time, I got to rely on Evelyn for help, until I was able to obtain a secretary who reported directly to me, and for advice on how to deal not only with inter-office squabbles, but in dealing with CID's member universities. Bruce would occasionally call in David Daines, a water resources lawyer with his own law practice in Logan. David was experienced in the international field, so was a valuable asset for us.

Once acquainted with the staff, I began learning about CID's many activities around the world. Beside Bruce's involvement with Iran and Hargraves' involvement in Honduras, which I had learned from my work there, the Executive Office had work, or was exploring possibilities elsewhere in the world. The variety of topics was as great as was the diversity of countries. For example, they included a several year, multimillion dollar study of cereals in Egypt with CSU as the lead university, an upcoming poultry project in Egypt, an RFP for a sorghum study, looking at Lebanon for as a place for possible work, an RFP for solar-powered irrigation, persuading Fischer to respond to an RFP for training in Burkina Faso, talking with David Daines about Honduras, a proposal for livestock marketing, an RFP in Cape Verde that Ray Solem suggested,

corresponding with Rollo Erich about an AID Indefinite Quantity Contract (IQC) in Sri Lanka, the small-pond production of Tilapia, as a followup to Max Lowdermilk's interest in Pakistan, and opportunities in Bangladesh.

In all of these activities I interacted with CID's contacts at these universities. I traveled to Washington, D.C. to talk with the World Bank and USAID about contract possibilities in the Sind University in Pakistan and an upcoming project in the Philippines. I attended the general meetings of the Board of Trustees, the first being in Salt Lake City and the last in Las Vegas. I traveled to California to get better acquainted with the University of California's computerized search program.

I wrote to USU department heads about CID's interest in irrigation. It wasn't long after the memo had been distributed that Jack Keller came over in a huff claiming that I was treading on his territory. Jack was USU's ranking and experienced specialist in irrigation. Claiming I had nothing other in mind than to promote USU's role in irrigation, I apologized and said it wouldn't happen again. By the time he left we had gotten to know each other better and parted amicably.

While all this was going on, I continued to maintain contact at CSU. I remained on the graduate committees of several master's students, which meant I had to review their theses and occasionally sit in on their defense. I corresponded with Duff about a couple of papers we were writing for publication, as well as with Mike DeMetre of AID and Jerry Johnson and Jim Smith of CSU's Mechanical Engineering and Civil Engineering departments respectively, about remote sensing of agricultural production in Peru, with Rollo Erich about a series of studies in Sri Lanka, and with Gaylord Skogerboe about an irrigation project in Pakistan. Responding to the need to publish, for I was still part of the CSU faculty, I got an article published in the Journal of Engineering Education: not high up on the list of academic accomplishments, but at least a publication. I even wrote up my notes on my projects planning course and got Praeger to publish my project development book as part of its Special Studies series.

So, it was a busy time: my responsibilities to CID and those remaining with CSU. So busy in fact, that I was away from home 50 percent of the time. During one of these absences,

the area's Mormon bishop told Vicky that she could come to him should there be the need, even though he recognized that she a "gentile."

Our home on the "Logan bench" was located on a beautiful spot. The mountains leading up to Bear Lake were just behind us, as was part of the golf course. In the late evenings the sun would cast rays of bright sunlight that the locals called "the Logan glow." The attachment Valley Mormons had to water revealed itself in the long ditches filled with water from the mountains to the western city limits. In the fall, the sumac on the mountain sides came alive with their bright red leaves. In the winter, small flocks of deer would amble down the street next to us looking for food. That was the upside to the weather. The downside was the frequent cloud cover that kept the snow from melting until mid-spring. So that after winter storms had dumped snow on us a few times, that snow remained on the ground until the spring thaw. By March we had grown so tired of the gloomy days and snow-packed roads that we longed for the many sunshine and snow-free winter days of Fort Collins.

Once settled in we searched for a church. We had limited choices. One was a Presbyterian church that had a modest congregation, mainly because there were so few protestant or Catholics in Logan. We eventually settled on a small Episcopal church down by the city square. When our family of six entered and sat down, the Priest welcomed us. We had nearly doubled the size of the congregation.

Vicky, Mike, Paul, and Paulo made the adjustment to life in Logan rather easily. Although, Logan *was* quite different from Fort Collins. It was a small, Mormon community, tucked away in a narrow valley 90 miles north of Salt Lake City. The corner drug store with its soda bar reminded me of my days in Grinnell. Teenage girls would stroll the downtown streets in long, flowing "Mother Hubbard" skirts. A local restaurant attached to a small hotel served first-rate breakfasts. And a few miles north of town was the Juniper Inn that served excellent steaks, but no spirits--or in any other restaurant in town: no wine, beer, or hard liquor. For that, it was necessary to join a club where one could "bring your own bottle." That and the Country Club, which served drinks. A local judge was a frequent visitor to the our Club, often dranking

more than he should. The local police, who often parked around the corner of the Club's entrance, were known to help him get home safely.

The boys got along reasonably well in school. They made friends with the neighboring boys, who nearly all were Mormon. Paul once told us that he wondered that if they didn't go to heaven, as they expected, they were wasting a lot of time going to church or experiencing the discomfort having to wear the traditional under-garment. Mike had a pleasant demeanor but not one to back down from a fight. One afternoon the three boys, along with Box (his last name), a large neighbor kid a year younger than Mike, were playing catch in the street in front of our house. I car with boys hanging out the window flipped a cigarette at them. Mike said something to them, one of the boys about Mike's size got out and challenged Mike to a fight. The kid took a swing at Mike, who ducked then flattened the kid with a single right cross. Picking himself up, he quickly jumped back into the car and they took off. Box could have taken two of those on at the same time had this turned into a gang fight. The four boys calmly returned to playing catch. I saw it all happen and was impressed.

Another time, Mike staggered into the house one evening obviously intoxicated. When Vicky and I confronted him, he said he had only had a "few beers." Up to that point we weren't aware that he drank *anything*. He went on to say that, "They made me do it." When we asked who, he said, "Some of his highschool classmates. So much for Mormon family life and discipline! That was enough for me. Agitated, with some force I shoved him into the shower clothes and all and turned on the cold water, saying "I don't want this to ever happen again." And it didn't

As a family we made ample use of the golf course and the small ski at the top of the canyon road leading to Bear Lake. Vicky competed in golf with the ladies; Mike and Paul played for the high school golf teams but not in the same leagues. Mike ended up challenging the two favored golfers on their team, but was always seeded second or third; never first. Even so, Mike felt he was the better player and proved it when he was medalist in the State championships for schools of Logan's size. Paul competed well at his grade level. Together, the two gained good (but expensive) experience putting for quarters on the practice green. Who

did they compete against? None other than Jay Don Blake, an outstanding golfer on USU's team. Jay Don was NCAA champion one year and barely missed winning the following year. Turning pro after college he competed well on the Professional Tour, winning one tournament that I remember and finishing in the top ten dozens of times. He now plays well on the Senior's Tour.

One afternoon while Vicky was home alone in the house, she opened the door to two young men dressed in their Mormon "uniforms" of white shirts and black ties and suits. They must have gotten our name from the local branch knowing that we had recently arrived in the valley and had not yet been converted. After listening to their pitch, Vicky began telling the two what she didn't like about their religion—mainly, the church's pressure on young girls to marry early and to have lots of children. After trading viewpoints for a while, they left. That evening when I had returned home, we got an anonymous telephone call asking if we were members of the ACLU.

In time, Vicky began looking for secretarial work. Often, she was asked, "Are you a Valley person?" She was to find out that not being a Mormon made her job search difficult; but that even had she been a Mormon, not having roots in the valley made it even more difficult. She heard that Mormon women from Salt Lake city, tended to be excluded from the closed society of Logan. Eventually she worked part-time as a legal secretary for Daines, an experience she felt rewarding and pleasant. When we decided to return to Fort Collins, we put our house up for sale with one of the neighborhood's real estate agents. Interest rates at the time were in the teens, which made selling difficult. We eventually dropped the agent and had Daines look after the few inquiries that came in. And three years later when we did sell the house, he drew up the contracts. Now, back to my work.

<u>Peru</u>

Right off, before I really got settled into my job, Bruce asked me if CID should bid on the technical assistance project for implementing *Plan Meris*. And, if so, would I be willing to pursue this opportunity. I told him that if he decided we should bid, we had an excellent chance of winning. Having helped design *Plan Meris* and knowing both the Peruvian and AID

personnel most likely to be involved impressed Bruce so he asked me to find out more about the RFP. Next day I called AID/Wash to learn more about the requirements. One of them was that this was to be a joint venture between a US and a Peruvian firm. Such a requirement bothered Bruce, since CID preferred working singly through one of its member universities. However, Bruce's ears perked up when I told him I had already met with Luis Ortega, the president of ATA-Class—a Peruvian firm with good credentials and connections, and Lostao. Consequently, our chances of winning the bidding contest should be good.

In June, Donal told us to go ahead with our proposal, confiding that he hoped CSU would be the lead university. I heard indirectly that Al Bishop, Head of Ag Engineering, and Ted Olsen warned Bruce that they thought CID should not get involvement in Peru. I hadn't yet met Bishop, who was the father of one of my Stanford classmates. But, of course, I knew Ted.

Before leaving for Peru, I asked Larry about budgeting and contractual details. He offered little, saying "Just go with what you already know." Was he setting me up? Or, did he really think that, given my position as Associate Director, I should know these thing?

Less than five weeks had passed since I came to Logan, and now I was heading back in Lima again. Once in Lima and having rested from the overnight flight, Julio drove me to the offices of their consulting firm, ATA-Class, where he now worked, headed by Luis Ortega and his partner, Jorge Lazarte. Also there were Axel, Lizarraga, and Hugo Osario. After greetings and trading remembrances, we talked about what they expected from for the week I would be there. I began by studying the request for proposals issued by the Government of Peru. I drafted a program of work with the associated costs for CID's part of the joint venture. CID's program would be meshed with Ortega's input for ATA-Class. The "meshing" turned out not to be easy, but with give and take on both sides, we came up with a proposal that we thought would be suitable for both the Peruvians and AID/Lima, which was providing the foreign exchange component of the loan. Ortega said he was satisfied with our work and would submit our preliminary draft to the "Commission"—the Peruvian organization responsible for evaluating the competitive bids and awarding the contract. The week passed quickly and before I knew it I was on the midnight flight headed back to the States.

Having worked right up till my time of departure I didn't have time to clean up or dress for the flight. I arrived at the Los Angeles International Airport at 6:30 a.m. disheveled, unshaven, and heavily clothed. So clothed because as previously noted Lima's coldest, dampest weather comes during our summer months, and the offices we worked in were unheated. As I opened my bags for custom inspection, the inspector looked at me sideways then asked me, "Is it cold there?" I said, "Yes, it sure is." My response must have been incredulous given this was mid-July and Lima is a coastal city. (How would he know about the San Francisco-type fog that encompasses the city?) He motioned to one of the other customs officials, suggesting that he cover his station for him. He then asked me to follow him into a small windowless room. Noting the bulge around my waist, step-by-step he asked me to take off my sports jacket, then a long-sleeve sweater, a sleeveless sweater, then my shirt, and finally my undershirt. At each step, I tried to elaborate on conditions in Lima this time of year. He was unmoved. Finally, after I was naked from the waist up, he grumbled saying that I could put my clothes back on. No apology through all this. My amused smile, since I felt no threat, could have helped put him off. Given the cocain and other drugs coming up from South America, he could have thought that he had "caught one."

While this first go at our proposal was quick and dirty, the next phase, which came a month later, was none of the above. This time our effort had to be painstakingly detailed and precise, since our contractual obligations, success, and profit rested on it. Ortega had called saying that I should be in Lima to help provide the finishing touches to our joint proposal and to stay if we won the bidding.

I arrived in Lima in early August after the customary all-night flight, checked into the Pension Cortez, slept till noon, ate lunch then headed to Ortega's office where Jorge Lazarte and others were waiting. Lazarte, whom I had met before, impressed me as an aristocrat of direct Spanish linage. He was of medium height, trim, light-colored skin, and straight dark hair. He could have been five years my senior but younger than Ortega. Later, when he invited me to his home, the assumption of aristocracy proved out. Though surrounded by nice, but modest-sized homes, on the border between Miraflores and San Isidro the interior of the living room where we

met revealed wealth. It was heavily carpeted and draped, with dark oak paneling, chandeliers; many gilt-framed original paintings adorning the walls. Reminded me of the elegance of Mantaro's home in Madrid. His manner was relaxed and pleasant, as though we were about to discuss some social event rather than a competitive bid. When I asked him to look at my cost estimate, he gave it a cursory look and said he'd get back to me. This demeanor of his was quite unlike Ortega's, who was friendly enough, yet intense, almost anxious as though a lot was riding on this joint-venture. Later, I learned that Ortega had once held high office in the Ministry of Agriculture. Could have been that the political party to which he belonged was out of power, the low salaries of even high-level government employees, or something else. I never asked.

I worked out of Ortega's consulting offices just off *Avenida Arequipa*. I would walk up the dark and dingy staircase to Ortega's nicely furnished suite of offices. Somehow the condition of the stairwells were unrelated to the well-appointed offices. The dingy staircase reminded me of the one I walked up in Madrid. Was this a Spanish thing? Or was it just that few people used the stairs so that they didn't need to be kept clean? Often working through the lunchtime hour, I would leave the office by myself and head for a small eatery close by. Happy to just have some time by myself.

In reviewing the cost estimates I had prepared during my previous visit, I found an error in overhead costs associated with the time our staff spent in Peru. The error was simple enough. I had assumed the same overhead rate for time spent in Peru was the same, whether long-term or short-term. The rate for short-term staff was about half that of the long-term staff. Thus, I had estimated costs at one level and, based on the number of man-months of short-term staff we would come up about \$75,000 short. CID contracts use its overhead charges to cover general expenses such as the on-campus costs of project manager. This was a large enough shortage that CID and CSU would be unhappy to say the least. Not an auspicious start at contract negotiations on my part. I spent more than one night tossing and turning, trying to find a way out. I simply had not had enough contract experience to know the difference. But I never forgot the difference in OH rates after that. I did not wont to blame Larry because I doubted he could have anticipated this problem. When I told Ortega and Lau at AID about the problem, they both said a correction could be worked out when the contract was drawn up.

So, I set the issue aside as best I could and worked on merging CID's budget with that of Ortega's. This wasn't as easy as I had thought. Late one evening in his office Ortega and I got into a heated argument. What rankled him so much was the high cost of CID's professionals compared with those of the Peruvians. While our base salaries were standard for those with CID universities, they were four times higher than his equally qualified Peruvians. When adding the supporting costs of transportation to and from Peru, housing, per diem, and our overhead, the ratio of total costs were on the order of ten to one. And, it was difficult for me to say that our staff would be ten times as effective. In fact, many of the Peruvian irrigation engineers were *at least* as good as ours; moreover, they knew Peruvian irrigation, the two areas where *Plan Meris* would be implemented, and, how the Government functions. This was almost more than Ortega could bear.

I argued that CID had a large pool of professionals with world-wide experience. But, my most compelling argument was that AID/Lima *required* this to be a joint venture. And from CID's point of view, there had to be enough positions on the project to make it worthwhile for us to participate. Ortega could understand my reasoning, although not liking it. So we were able to move on. In the end we agreed to have CID fund three long-term positions and several short-term positions. The latter would be in areas, such as extension, agronomy, livestock, and cooperatives, where CID had a clear technical advantage. The long-term positions were our team leader with irrigation experience, a marketing specialist, and a junior irrigation engineer who would be stationed in the Huancayo Valley.

Once we had resolved our differences, Ortega introduced me to Fox, one of his influential friends in the Ministry of Agriculture. His name was not of Spanish origin, nor were his features. They were Chinese. Fox told us about the bidding process and, on the side, that are chances of winning the contract were good. This surprised me, since Ted Olson had said that Fox favored the Fredericksen, another US firm with extensive experience in Peru. He said Fredericksen had worked in Peru for a long time and had political clout. By now I had concluded that Olson was not on our side, even though he was connected with USU. I was beginning to think he didn't know what he was talking about.

By now Ortega and I had largely settled our differences, we prepared a rough draft of our proposal with accompanying budget to Fox who was our liaison with the "Commission." The Peruvian Government had set up the Commission as the body that would review proposals in the competitive bidding and eventually recommend the winner. With that done contract negotiations could begin. Several days later, Fox informed us that the Commission favored our proposal, provided we could get our costs below \$900,000. That would not be easy, since our estimate had come in several thousand above that amount. That set Ortega and me at odds again. I maintained that the three long-term positions had to remain, but I reduced the short-term input. Ortega essentially maintained his original program, arguing that little would be saved given his staffing costs were one tenth those of ours. I basically agreed. But having done so, I would wake up in the middle of the night wondering if I had given away too much. During most of this time, Lostao had been on a consulting trip to Chile. When he came back, he said he didn't like the way Ortega had loaded up his side of the venture. Thought he was being too aggressive and not open in his dealings with me. Lostao and I had formed a trusted relationship over the past three years, which he wanted to maintain. His association with Ortega had only been recent.

At this point Francisco Coronado del Águila got involved in the act. Coronado cut a wide swath as he strode into the room where Ortega and I were meeting with other Government officials. He informed us that he had taken over Lostao's position within the Ministry and would be administering our contract should our negotiations with the Government be successful. He was short, trim, with a hint of Inca blood in his features and complexion. He exuded confidence bordering on arrogance, was cordial without being friendly. All he needed to resemble Napoleon was to have him stick his hand inside a vest. After briefly welcoming me, he explained that his organization, *Aguas*, would be in charge of the contract we were bidding on. He emphasized that, because the funding from AID was a *loan* rather than a *grant* that had to be repaid, he and his government were going to drive a hard bargain. Then, he abruptly left.

During the next week after we had pared down our cost estimates sufficiently, I turned to the contractual terms on which the budget was based and the responsibilities of ATA-Class and CID under the joint agreement. I had experience with contracts dating back to the time I was an Office Engineer with Creole; but I had never been party to a joint venture. Ortega helped me out on the latter. He had participated earlier with a German consulting firm and offered this as a successful example. I studied it and was satisfied with the arrangement. At least Ortega and I were coming together now.

Soon the Commission informed us that we could go ahead in our negotiations. At this point, Coronado entered into the act and things got complicated. One of the sticking points had to do with the Peruvian Governments *insistence*, that CID put up a performance bond and that any contract disputes would be handled in the Peruvian courts. On both these counts I was treading on thin ice, having neither experience nor a good feeling about them. I thought the performance bond made sense, but I didn't like the idea of the Peruvian courts being the venue for disputes. Eventually, I cleared these two points with Bruce, who felt uneasy about them, but said if the Peruvians wouldn't budge I should accept them.

Coronado and I also crossed swords over payment for local costs such as rentals, fuel, and supplies. He insisted that the contract provide a fixed amount in soles. When I objected because of the weakened sol, he said that although the country had experienced high inflation in the past, the situation had stabilized. He considered my position an insult to Peru. I responded that we'd accept soles, but not at the *current rate of exchange*. Instead, I argued that we should estimate local costs based on what they would be if the sol stabilized, convert this to dollars, then receive soles at whatever the prevailing rate of exchange for the period when the costs were incurred. Had we accepted the *current rate of exchange* as the basis for payment we would have been in deep trouble because inflation continued and, with it, the value of the sol. And with 20 percent of the contract covering local costs, CID's loss could have been well over \$100,000. Where was Larry on this one?

With my dealings with Ortega and Coronado to my satisfaction, I turned to AID/Lima. I wanted to know about some of the clauses in AID's Instructions to Bidders—the one I had called Washington about at the outset. It read, more or less, "AID/Lima is not a party to the contract. That is between the Government of Peru and the successful bidder; but it has the "right of

review" before the contract is signed." Fair enough. That sounded reasonable. Fine, I thought to myself. But just to be on the safe side, I asked the lawyer at the AID/Lima office what he would be looking for as part of it's "right of review." He told me, he couldn't tell me, since AID was not part of the negotiations! "How can that be," I protested. "You have the right of review, yet you can't tell me what you're looking for?" "You got it!" he said. Don't know why such double-talk coming from AID should have surprised me.

I then looked at the contractual provisions affecting our two long-term staff who would be living in Lima, including housing, transportation, and education for the children. Because AID/Lima had jurisdiction over these provisions, I wanted to get its agreement on the contractual clauses covering them. I was able to arrange a meeting with Yeager, the AID Director. He told me that he wanted to put our staff on the same basis as those working for the Mission. He didn't want to make CID staff feel like second-class citizens. He would allow his housing office to help in finding rentals. That would be a help, I told him. I next asked if our staff had access to AID's warehouse that stored household furniture, assuming our staff would find it easier to rent unfurnished than furnished. He could do that too. I thanked him and was headed out the door when he said all I had to do is contact his Executive Officer. When I talked with the Exec, who looked and acted like a retired Army Lt Colonel, he said that help in house hunting and providing furniture was out of the question. I retorted saying the Director (the Mission's highest authority) had agreed to this, he said that Yeager hasn't the authority to grant you such things. So, what I thought was a good meeting with Yeager turned out otherwise. As for shipping personal automobiles for our staff into Peru, that was out. Government policy didn't allow it. Nor can a car purchased in Peru be shipped out of the country. I was aware of this possible benefit from my experience in Ethiopia where such provisions were allowed. When I complained to the resident AID/Lima lawyer, he said, "You're an old hand. You shouldn't be signing a contract if you don't like the terms." No help there either. But access to school-age children in Lima was favorable. I visited the American Community School in one of Lima's suburbs. The setting was lovely: rows of single-story buildings set amidst a large expanse of green lawn, and towering eucalyptus. The Superintendent was cheerful and said the school would have no problem in accommodating our staff's children. He gave me the tuition costs, which I determined to included in our contract. With these details out of the way, I turned to the costs of shipping and

transport insurance for the equipment, household goods, and other items that we had responsibility for. Local shippers helped provide me with this information.

Over the next few days, Ortega, Julio, and I reviewed the budget and those contractual provisions related to our joint venture. This we submitted to Fox who in turn submitted it to the Commission. Finally, we hear that the Commission was satisfied. Any last minute problems can be handled when the contract is finally drawn up. With all of this settled, we let out a sigh of relief. The next evening, Ortega invites about twenty of us to his house then takes us out to his favorite *Chifa* located on the top floor overlooking Avenida Arequipa and Javier Prado Boulevard. We drank, ate, traded stories and generally had a good time. Around 10:00 Julio drove me to the airport for my trip back home. Around midnight I boarded a flight to Los Angeles on Varig Airlines. This airlines had been touted as one of the best serving South America. And it lived up to its reputation. We still had a contract to sign, but the hard part was finally over.

Vicky received me with open arms and the boys were anxious to tell me what they had been doing. Bruce welcomed me back as well; although, he told me again about his concern over the performance bond and having to handle disputes in the Peruvian courts. He also suggested I had spent more time in Peru than need be—at least, what he was used to. Once settled, I arranged for the contract to be translated from Spanish to English. When that was done, Bruce, Larry, and I went over the contract line by line. Finally, the two came up with a few changes they thought necessary before CID's Board of Trustees would sign off. Larry had scheduled a trip to La Paz where CID had a project of long standing. On the way, we agreed that he could hand over to Ortega the few items we wanted changed in the contract. Larry flew to La Paz with its touch down in Lima but Larry did not contact Ortega nor pass on to him the contractual changes we thought were necessary. We didn't know why he didn't make the contact. He had "fled" from Saudi Arabia without making contact. Perhaps he felt uncomfortable making the contact in Lima. Or, it occurred to me, that he preferred to leave the Peruvian contract totally in my hands, not wanting to be a part of it. I'll never know. Just another instance of my not knowing how to read him.

In late October, I returned to Lima for a week to put the final touches on the contract. This involved tense discussions with Fox, Coronado, AID reps, and Ortega. In the end we worked out our differences. When that was done, I did the exceptional. I went to a residential bar that Rollo Erich had told me about. Johann Sebastian Bar was a residential watering hole with class. The bar occupied the first floor of a three-story house not far from the *Pensión Cortes*. I could barely see the dozen or so couples sitting at small tables scattered around the room. The soft melody of a classical piece wafted across the room. When a smartly dressed waiter came to my table, swayed by the atmosphere, I ordered a double cognac, then observed those around me. Before long a middle-aged, bearded fellow took his position in front of a mike beneath a staircase and proceeded to lecture to a subdued audience various important events in the life of Mozart. After an hour or so, I walked out excited to have found such a classical spot as this unlike any I had seen before or since. I vowed to bring Vicky along should I ever be able to arrange for her to accompany me on one of my Peruvian assignments.

Staffing for Peru

Once I was back in Logan I turned my attention to staffing the long-term positions. Bob Longenbaugh, a civil engineer specialized in groundwater hydrology at CSU once told me that he was interested in working overseas. So, after some persuasion he accepted the position of project manager resident on campus. Bob had grown up on an irrigated farm in Colorado. So, he had the necessary qualifications for the job. When CSU had difficulty finding anyone to be chief of Party resident in Lima, Bruce recommended Max Williams whom he had known for many years. Because Jerry Burke had been wanting to get in the act for some time I contacted him about the long-term marketing position. He proposed Gene Ott, a marketing specialist, for that position in Lima. For the resident position in the Huancayo Valley I went out of my way to bring in Leroy Salazar. He was one of two CSU exchange students whom had been awarded a semester of study at the University of Monterey, Mexico. I was on the selection committee. And of the many who applied, Leroy stood far ahead of the rest; probably the best agricultural engineering student in his class. Beyond that, he was courteous, mild mannered, from the San Luis Valley in southern Colorado, and spoke fluent Spanish.

I had approached Darrel Simons about persuading Leroy to join our project. But Darrel thought Leroy was already committed to go with Dole Pineapple in Hawaii. Even so, I told

Leroy about the opportunity to work on a project for which he was well qualified and would make an important contribution to the needy in Peru were he to accept our position there. His experience in the San Luis Valley would be valuable because the major crops grown there at high elevation were irrigated potatoes, barley, and alfalfa, similar to those in the Huancayo Valley. He accepted much to my satisfaction.

Back to Kenya

With my responsibilities in Peru reasonably under control, Howard Peterson, one of USU's two CID trustees, and I left for Nairobi the middle of February. Meeting us at the Nairobi airport was Herb Mann, one of CID's team members there. Going through customs was breeze. One could have expected this, given the importance of tourism to the economy, primarily from the numerous, and excellent game parks. Herb had planned on stopping at AID's downtown office to meet Carlos Nelson, who had been AID's Deputy Director in Addis, and his deputy here in Kenya, but neither of them were there so we went on our project offices. These were on the second floor of the Railroad Building. These well-appointed headquarters contained many offices that had housed the Railroad staff in their glory days. There, we met Byron Palmer, CID's project leader who also was an irrigation engineer, and Byron's Kenyan counterpart, Charles Gichohi. Gichohi's Anglicize first name did not surprise us, given England's influence over the country. That done, Byron gave us a quick account of the conditions in the country that had led to the project and what the project's objectives were. He told us about the problems caused by population pressure on the temperate highlands where the size of individual farms had become smaller and smaller and cattle over-grazing had become widespread.

The Government of Kenya and multinational and bi-lateral donors had hoped this pressure could be ameliorated by promoting agricultural development on the semi-arid lands adjacent to the highlands. If the resulting project were successful agricultural production there would increase and the quality of life for the settlers would improve. But success was not pre-ordained. Physical conditions there were more challenging than in the highlands: rainfall was less and more erratic, temperatures were higher, and the soils poorer. The main advantage of the area was it's closeness to the Nairobi markets and the large amount of undeveloped land.

The study's approach was to gather large amounts of data on the physical, economic, and human resources. The data pertaining to soils would come from the reconnaissance soil survey being simultaneously conducted by the Soil Conservation Service. With these data collected and analyzed, Byron and Charles could draw conclusions and make recommendations on the viability of transferring large numbers of farm families to the target areas. For my assignment the area of focus was the Machakos-Kitui-Embu districts to the east of Nairobi. Byron went on to introduced Howard and me to some of the team members. One of these was Ambercromie, the livestock specialist who worked for AID/Addis when I was there.

Harold and I scarcely made it through the afternoon without falling asleep. Not surprising given how little good sleep we had gotten over the last 48 hours. Once in our hotel room, I had a light meal and went to bed, but woke up at 2:30 a.m. fully awake. It was late afternoon back in Logan. What else is new? So, I read in bed for a couple of hours, then got up. Harold and I walked to the project office where Palmer introduced us to the rest of his CID and counterpart staff. The second morning we met Doug Caton, AID/ Washington's highly respected guru on African development. Caton gave us the reasons for calling on me to help Byron complete the project. Caton said that he knew about and appreciated CID's work and hoped that I would be able to redirect's Byron's approach. Lending urgency to my assignment was the pressure the Conservation Service was putting on the CID project. Both the Service and CID were supposed to reinforce each other's work. But the two with the Service had nearly completed their work, while CID's work lagged far behind. The Service's headquarters in Washington had bluntly stated that the Kenyan team would soon pull out of Kenya whether or not Palmer's group had finished.

After the meeting as Howard and I were walking back to our hotel, a woman of questionable repute sidled up to Howard and whispered something into his ear. Howard said, "You're wasting your time with me. Why don't you try your luck with this young fella next to me?" Where upon she grabbed my arm in a vice grip. I relied on an old trick I had learned in the Navy. I found the gap between her hand and wrist and squeezed with my thumb and forefinger. She soon let go. I don't know if this hurt or if she just decided to let go. Even during daylight, street hawkers offer to exchange US dollars for shillings at considerably more

than the official rate. I had heard rumors that government agents would sometimes be among those approaching tourists. I never even thought of changing dollars this way. An arrest could get me thrown out of the country, or so I thought.

Despite the urgency I accepted Nichols the Conservation Service rep's invitation to play golf Friday afternoon. On Saturday, the Grindells took a group of us to the Rift Valley to observe a Masai village where they had been working as missionaries. And Sunday, Byron took us to the impressive game park that borders the city. The twelve-foot high fence apparently protects the city from the lions and other carnivores there. I guess I misread the urgency. Or, was it that these guys knew how to live with the pressure?

It was back to work the following Monday. For the next three days Howard and I attended presentations on land classification, another on the potential of marginal lands. We visited the Machakos, Kitui, Embu Districts which were one of the target sites, met with officials of the Ministries of Agriculture, Finance, and Planning. Thursday Byron invited us to his home for dinner where he asked what I would be telling Carlos the next day. I replied that at this point I wasn't sure what that would be. At the AID meeting I did my best to make my thoughts general, except for the date of my return. By noon, Howard and I were headed back home.

Chad

Jerry Matlock, Arizona Trustee, approached me during one of the Trustees' meetings saying he wanted me to accompany him on one of his periodic appraisals of a CID project. This one was a range and livestock management project in Chad. Jerry was not a Vice President, Dean, or Department Head, but the Director of Arizona's International Range and Livestock Management program. He was a no-nonsense, although friendly, guy strongly dedicated to his work. I'm unsure why Jerry wanted me to accompany him, aside from the practice of having two on these evaluations. Most likely he wanted to get a firsthand look at me since I had been on the job only six months.

Our overnight flight took us to Paris, where the layover allowed us to rest for awhile. That evening we boarded an Air France flight with stops in Nice and Tripoli. We landed in N'Djamena at midnight. After the short trip into town we checked into a rickety, two-story wooden hotel in which the only toilet for the ten rooms on the second floor was down an open walkway. The next morning we met with the two members of the CID contract: Ben Wood, who had some sort of Univ of Arizona connection. Ben's office was a joke–just a one-room shack on the city's edge without shelving for books and his furniture was a small wooden table and a orange crate for a chair. Ben worked there alone. Even so, he and his wife were happy with this two-year assignment.

Rudy Griego was another story. CID had picked him up by means of a nationwide search for someone with experience working in Francophone countries. His French was excellent. Rudy was rebellious over the lack of support from CID. He threatened to quit if things didn't get better. Jerry took note.

Then we moved on with visits with AID's Program Director, a Director with the Ministry of Livestock, the local CARE rep, the US Information Service, and our Ambassador. After that, Ben drove us a short distance outside N'Djamena to visit one of his range management locations. On the way back we stopped to observe an open air market where women were selling fresh vegetables. That was the extent of our "scouting" the area. Jerry, who was calling the shots, said he got little from field visits such as this one.

Normally, we would not be able, nor necessarily want, to meet with the Ambassador. But he had asked to see us. He was a warm, friendly guy who simply wanted to meet us and learn more about CID and the Univ of Arizona's program. He said that, since Chad is so much off the beaten path, he has little opportunity to meet and talk with people like us. To our surprise, he invited us to have lunch with him and his wife at the Ambassador's residence. The layout was virtually an oasis in the desert: a large house with a large swimming pool set in an expansive green lawn and shrubs amidst tall trees.

Having little left to do our next to last day, I wandered around town. The residential, commercial, and government buildings still displayed the Colonial days. Many of the streets were unpaved, traffic was light, and those venturing out in the heat of the day wore long and

flowing lightweight robes. Few acknowledged my presence. The central park showed more bare soil than grass. The shade from the tall trees made my stroll there pleasant.

Jerry and I went over our notes, relaxed, and packed for our midnight flight. Sitting in the lobby of our hotel, we began to hear rumors that our flight was going to depart at noon. No call from the airlines, just information spread by word of mouth. When we asked the hotel clerk to contact the airlines, we learned that the rumor was correct. So that's how its done in a backwater place like Chad. It was a good thing we were hanging around the hotel, for if we had missed our flight it might be days before another flight would leave.

Our return home was uneventful, other than our flight to Paris. That evening on board Air France, the stewardesses served us red wine, French bread with pate as an appetizer, capons and baked mashed potatoes with artichokes, followed by a cheese platter, fruit, and coffee. I thought we were being treated royally. Not Jerry. He complained saying, "What kind of food is this? Couldn't they have served us a steak?" So, Jerry wasn't the international guy I thought he was, but an Arizona cowboy. Once landing in the States before going our separate ways, Jerry gave me a few notes concerning our evaluation; and, being the administrator he was, told me to write the report. He said he wanted to review the draft before I finalized it. He gave me no deadline, but I figured he would be unhappy if I delayed this assignment. I worked that report into my other responsibilities.

Paraguay

My other trip with a Trustee was with Harold Matteson of New Mexico State Univ. Like Matlock, he was not even a Department Head. It was because of his experience and strong interest in international agricultural education that the University selected him as a Trustee. Harold was a square shouldered, stocky guy several years my junior in international experience as well as age. His build and intensity reminded me of a middleweight boxer. Harold had asked for my help in preparing an unsolicited proposal to become effective as soon as NMSU's current agricultural education project in Paraguay ended. Normally, AID does not welcome

such proposals. So few even get considered. Nevertheless, Harold thought it was worth a try and that his intended unsolicited proposal had a chance because the AID Director in Paraguay was a loyal NMSU alumnus.

Harold and I flew separately into Asuncion because I had to stop in Lima on the way there. Meeting in the hotel lobby where we were staying Harold told me how NMSU was contributing to Paraguay's program in ag education, as well as his thoughts about a follow-up project. Then, he showed me our schedule of meetings, the topics to be discussed, and field trips we would take. All this in advance! And I thought I was methodical.

The next day we visited the AID Director, Abe Peña, who warmly welcomed us. With him were the Deputy Director, Jorge Montavan, the project manager, Larry Laird, and NMSU's in-country representative, Ted Arvizo. Peña said he was going to appoint the Deputy Director, Enrique Montavan, as our principal contact. Peña briefed us about the economy, the ag sector, ag education, and the contribution NMSU's project was making. Harold then outlined his proposal for continuing NMSU's activities in Paraguay. As we were leaving Peña said he would wait to see what we had to offer. He then turned us over to Montavan saying he would be our contact here. Arviso, took us in-hand by arranging office space, two typewriters, and showed us the supply cabinet. That done, he introduced us to Juan Morales, an Extension Specialist, and Dallas Fowler, AID's regional engineer. That evening Harold and I brain-stormed about the content of our proposal and how to present it. The next evening Arviso had us over to his home for dinner: a nice, welcoming gesture.

The next day Harold introduced me to a former student of his, George Gonzales. He had received a master's in ag education and had completed his course work for a PhD some years earlier. Although the field experience he was gaining with the project was valuable, Harold doubted he would ever finish get his PhD. Few do, once they leave school, unless the work ties in with his professor's interests. George accompanied us as we visited three of the ag tech school in the provinces. Returning that evening, George introduced us to his second wife, Stella, whom he had married shortly before coming to Paraguay. While George was out of the room she revealed that he was trying to lose weight by reducing his consumption of candy. She

doubted he would be successful given his overwhelming fondness for M&Ms. She went on to say that one weekend when they both were home she was looking for him around the house. To her surprise she found him in a darkened closet with a bag of M&Ms on his lap stuffing the candy into his mouth handfuls at a time. She said she could handle this quirk of his, but wondered how much more there was to learn about him.

I wasn't able to help Harold much on the technical side. I didn't need to since vocational education was his specialty. My input came in showing how the proposal fit into Paraguay's development program, in guiding him on how best to write a proposal according to AID/Wash specs, and preparing the budget. After consulting with the Deputy Director from time to time, Harold and I had a draft proposal that we thought acceptable. When we presented the draft to Montavan, he said he understood what we were proposing and with that he could prepare the PID and send it to AID/Wash. He thought that our proposal being a follow up to an existing project had a chance of being accepted.

The next day we headed our separate ways. As we parted, I thanked him for the opportunity to come to Paraguay, which was for the first time. I found the country attractive, downtown Asuncion looked Old Time Colonial, and our hotel was up-scale but not touristy. I withheld my doubts about our proposal being accepted, mainly because of the Director's lukewarm reaction.

Footnote: That Harold was intense, there was never any doubt. The story made the rounds that when he was monitoring NMSU's Ibb project in Yemen, he was known to arrive in Sana'a around midnight and then arrange for a driver to take him to Ibb over two hours away. On one of these trips, the driver ran off the side of a steep mountain road. But instead of crashing hundreds of feet below, the car landed upright on a switchback just 20 feet below. After dusting themselves off and checking the vehicle and finding it reasonably okay, they continued on their way. Harold never told me the story; I heard it from others.

Bolivia

After meeting with Lostao briefly in Lima, I took the short flight to La Paz. Landing at the airport is quite an experience because of the high speeds caused by the thin air at over 13,000 feet. One reaches the capitol of La Paz 1,500 feet below by descending a winding road down the incline from the *altiplano*.

Bruce had wanted me to visit the CID rep there simply to acquaint my self with one of its projects and to meet its team leader. CID's multifaceted activities, funded by the AID Mission, had been in place for years. My arrival at midnight coupled with lightheadedness and weakness from the altitude, on top of a terrible head cold, made this an unpleasant though memorable experience.

The next morning I took a taxi to CID headquarters in the center of La Paz where I accepted a small cup of rich dark coffee from Boyd Winnegren. He was a respected and tenured economist at USU; and CID's long-time resident in Bolivia. He lost no time in blasting the CID organization including Bruce. And he did not stop there. He went on to chastize the country's foreign policy, AID's contribution to that policy, and their misdirection to economic development. There was scarcely a participant or topic he didn't criticize. I weathered this diatribe as best I could. What could I say, I had been with CID less than a year. Even so, Boyd invited me to his bachelor apartment that evening. Over drinks and food that Boyd fixed we turned to more agreeable topics. He wanted to know more about me and I about him. So, when we parted two days later, we parted as friends.

I made the dutiful contacts with the AID Mission. There I met a Bolivian who invited me to his home over the weekend for drinks, snacks, and talk. What I found most interesting was the discussion about Che Guevara. One of those present told about meeting Che while he was in La Paz recruiting followers to carry on his dream of a worldwide revolution that had begun in Cuba and hoped to expand in Bolivia and then to the rest of Latin America. I had read The Diary of Che Guevara not long before so I was familiar with how futile his attempt in Bolivia had been. The speaker spoke admiringly of Che as a person, but not as a visionary. My last stop would be in Tegucigalpa before heading home.

Honduras

Bruce had asked me to stop in Honduras on my way home to find out what was behind AID's comments that Hargreaves was unresponsive to its requests. Bruce, knowing that I had worked in Honduras, thought I might be able to help by spend a couple of days there with David Daines, representing CID, and with Al Bishop, Department Head of Irrigation Engineering of which George was a member. A highlight of my trip there, though it might seem hard to imagine, was my stopover in Panama City. My departure from La Paz at 10:30 put me there at 3:00 a.m. I checked into a rambling motel with a tropical motif close to the airport. Wide awake I walked through the lobby to a meandering swimming pool surrounded by palm trees and frangipanis that were in bloom. The setting and fragrance was straight out of Hollywood. I put on my swimming suit and leisurely swam for half an hour. Then off to bed for several hours.

After a short flight I landed in Tegucigalpa by mid-afternoon. David Daines and Al Bishop were staying at the Maya Hotel. They brought me up-to-date on George's problems with AID: namely his failure to develop a strategy for the project and the needed institutions.

Bishop, Daines, and I spent much of the next day at the AID Mission. AID's comments were just a rehash of what I had heard before. George wasn't doing what they wanted, nor could he have done so had he wanted. Besides, George didn't care! As a recognized expert on evapotranspiration, critical to rain-fed agriculture, he was doing what he knew how to do. For example, appraising the need to buy lysimeters, which are important in planting and harvesting corn, one of Honduras' main subsistence crops. Both AID and CID had been wrong in giving George this assignment in the first place, but I didn't say as much. Since I was leaving the next day, I left George's problem with Daines and Bishop to handle.

Going to Kenya

Last December, Howard had called saying that Carlos Nelson, now AID's mission director in Kenya, wanted me to come over and help out. I arranged for Vicky to accompany me. But rather than fly there directly, Bruce wanted me to I route our trip so as to visit Honduras once again because AID was still not satisfied with the work Hargreaves was doing. On the way Vicky and I overnighted in New Orleans where we took in the French

Quarter. While killing time at the airport because of a flight delay, Vicky and I decided to try the oyster bar. That was the first time that both of us we had eaten raw oysters at our discretion. We liked them! Growing up, having to swallow raw oysters was part of an initiation ordeal. But now we were converted.

On board Sahsa, Honduras' national airlines, as we drew close to Tegucigalpa, I had prepared Vicky for a "exciting" landing: the one where the pilot makes a sharp turn at the last minute and lands downhill. She said I hadn't exaggerated the adrenalin surge she had. Talking with David Danes and Al Bishop after checking into the Maya, I learned that little had changed since my last visit. This time, Bruce had suggested that I spend time here to turn things around.

I walked up the hill to the AID offices where I talked with Lovass and Thurston as before, and with Dagata, the AID Director. who was such a pain to us in Cairo when he was Deputy Director. So, now he had moved up the ranks. They confirmed that Hargreaves was still unresponsive to their needs. Later, when we were alone together, I had a spirited exchange with Lovass over CID's responsibilities to AID in general and AID/Tegucigalpa in particular. When I defended George, albeit with reservations, and said that I would try to get something positive started, Lovass grew skeptical, thought I was simply "blowing smoke." He went so far as to begin writing notes saying he was "recording" our conversation and would hold me to my word. For some reason I didn't feel threatened. I thought he was just gaming me.

Over the next four days, which included the weekend, I talked with George some more, huddled with Daines and Bishop, then set to work. I prepared an outline that George could use for his report, which I thought AID might accept. Then I began to write well past midnight with Vicky typing the drafts with the typewriter Dave had provided us. We did break when George and his wife Sarah drove us to a popular spot called Valle de Angeles. Because the trip wore me I went to bed early then got up at 3:45 a.m. to continue writing. I showed George the pages as Vicky finished typing them so as to get his reaction. He vacillated: first saying what I had written was okay, then after consulting with Bishop saying he wasn't so sure. By then, I was running out of time, so I kept writing so as to complete my outline. Dave and I went over what he had written then I called for a meeting with Thurston. Having skimmed what Dave and I had

written, he said he was satisfied since we had followed the outline and concepts agreed upon earlier. The next step was to hold our final meeting, which involved Dagata, Lovass, Thurston, George, Daines, Bishop, and myself. We thrashed about for three hours. By 8:00 p.m. when the meeting broke up all seemed to be reasonably happy with our draft. This had been a good session. Later, I continued to work till 1:30 making a few last minute corrections to the copy I would leave behind. Vicky and I rose early the next morning to catch the 8:00 o'clock flight to San Pedro Sula, then on to New Orleans and New York City before departing for Frankfurt. The most rest we got over this period was on the flight over the Atlantic.

We landed at Frankfurt early in the morning where we rented the lightweight VW Rabbit. Getting on the autobahn we headed for Stuttgart where Becky was teaching children at the American military base. This assignment was the last part of her scholastic requirements for her B.A. degree at CSU.

Driving this highspeed expressway was frightening under any conditions. Doing so while feeling drowsy from the lack of sleep over the past few days made it even more so. Some of the high-performing autos on the autobahn, the Mercedes Benz, BMW, Ferrari and Porsche, could cruise well above 100 mph. I felt uncomfortable getting Rabbit up to 75 mph, yet thought I needed to keep from being run over from behind. When we came up behind a slow-moving truck, I would slow up and wait for a long, flat stretch of road before attempting to pass and even then as push got into the passing lane and pushed the accelerator to the floor invariably I would see in the rear-vision mirror, the flashing headlights of a car right behind us. I don't know where the car had come from. But with a 50 mph differential, it didn't take long before someone would overtake us.

Once in Stuttgart we checked into a modest, clean hotel in the middle of the city. Two things stand out in my memory: the large double bed with its feathery mattress and the downy pillows. Wanting a quick bite to eat, we walked out onto the street where we spotted a street vender selling hotdogs. When we asked for sauerkraut to go along with hotdog, the vendor became indignant. He replied in broken English. "I'm just a poor street vender. If you want sauerkraut, go downstairs to the hoffbraus. They'll serve you sauerkraut!" After resting we

contacted Becky at the military base. She seemed well adjusted and enjoying herself. We stayed for two nights, drove back to Frankfurt, and boarded the Kenyan Airlines flight to Nairobi.

After landing at the airport, we took the shuttle to the Stanley Hotel where Byron Palmer was waiting for us. After a brief exchange of greetings, he tossed me the keys to a Peugeot sedan and said, "Here. Follow me." Not an easy task in the evening traffic, especially because in Kenya one drives on the left side of the road. Vicky and I got especially uneasy as we approached the several "round abouts," on the way to our new quarters. As we approached each roundabout, Vicky would lean against my side and repeat "Think left, think left." It worked. In all the driving over the next three months we never ended up on the wrong side of the road. (It wasn't till we had been back in Fort Collins for several months that I absent mindedly reverted to driving on the left side of the road. The on-coming traffic several hundred yards away alerted me to my mistake so that I had time to pull over to the side of the road and head the other way.)

Before long we were in a pleasant, tree-studded neighborhood. We entered through a guarded portal into the large compound where we would be staying in one of three maisonettes. We would be staying in one of them, Scilley and Sketchley of the reconnaissance team lived in the other two. The Peugeot surprised us when I turned off the ignition key. We heard what sounded like a sigh as the car settled down closer to the ground. Hydraulic shocks, I thought. In the light of day the next morning Vicky and I were pleasantly surprised by what we saw. The maisonettes were set within a walled grass area of at least an acre with tall trees and an abundance of well maintained shrubs and flowers. The beauty of the place cannot be attributed solely to the British, who helped settle Nairobi. The agreeable climate due to the mile-high elevation and the ample, well distributed rainfall helped. We had a gardener who also served as a guard during the day; another guard took over for the night. Both were necessary because of the break-ins throughout the city.

That first morning, Byron repeated what he had said to me the month early: the reasons for the project, project objectives, and how I could help. He went on to describe the progress his team had made in gathering resource data; he also showed me examples of the soils data from the reconnaissance survey, which included soil type, depth, and suitability for cropping, pastures, and

forestry. He explained in more detail, than he had in my previous visit, the team's wide array of disciplines. They included agronomy, soil science, livestock, dairy, seed production, irrigation, forestry, water supply, ag economics, farm and range management, extension, geography, sociology, road construction, public administration, and development planning. Long-term staff with their counterparts covered many of these disciplines while the two from the Soil Conservation Survey were responsible for the reconnaissance survey. The number and diversity of these disciplines boggled my mind. No wonder Bryan needed help.

AID's concern as expressed to Howard and later to me during our previous visit was to integrate the efforts of this diverse group. Rather than have each specialist conduct his own study and report on it in a *multi-disciplinary* way, AID wanted and the Kenyans expected an *interdisciplinary* study that would confirm or reject the idea of setting farmers in the semi-arid areas. The current approach allowed each specialists to produce a report *covering his discipline*, but left interpretation of the findings to someone else.

After I got settled at work it was my custom to eat lunch at my desk, rest a few minutes, then cross the busy, four lane Haile Selassie Blvd to the large park with its many monuments. It was not easy crossing the Blvd directly. But I preferred that to walking a couple of blocks to use the overhead walkway. Once on my way back to the office I nearly cashed it in. As I approached the curb directly across from our offices I looked to my left, as I would in the States, saw that the way clear, and was about to sprint across the two lanes to the divided area. But at the last minute my instinct told me to look to my right. What I saw were cars barreling down both lanes at perhaps 50 mph. Had I tried to cross, without looking right I would never have known what hit me. Taking several deep breadths for my nerves to settle, I was able to cross without a problem. Just one of the dangers of living abroad where driving is different from that at home.

During the first couple of weeks I talked with team members and read a lot of the progress reports. I studied the reconnaissance survey maps, which contained far more information than I had realized. I wondered how I could make use of all this information. Then, I got lucky. One of the reports written by Dr. Bernard was on the population carrying

capacity of land. That is, how many farm families could be moved to an area while meeting target farm income? This was a new concept for me, but I thought the idea intriguing. Using data from the soil surveys was also new to me. I thought these two concepts might offer a basis for focusing the team's efforts.

By then, I had gotten to know Herb Fullerton, a tenured full professor of ag economics from USU, Charlie Hash, who knew about cropping patterns and rotations, and Herb Mann, who knew farm technology. The four of us would huddle together and brainstorm about a strategy for the analysis and final report. In the evenings as we got further into our work Herb and Charlie would walk across the road to our place to continue our discussions. I was pleased when they told me they were glad I had come on-board. Until then, they had not been able to see how to integrate the information the team was generating.

Our approach was the following. We would begin with the Government's target for family income. This constraint, if you will, meant that whatever we came up with in terms farm size, use, and practices should at least meet this income goal. Next, we would use the maps that Scilley and Sketchley had produced. The most relevant factors of these maps, for our purposes, was soil quality, depth, and slope. Soil quality and depth would help in appraising farm productivity, and hence crop yields. Soil slope, as well as depth, would tell us whether the land was suitable for farming on a sustained basis. The maps were overlain by long-term rainfall and climatic data, which together with estimated soil fertility would suggest the potential yield from alternative cropping patterns.

We looked at two levels of farm technology: one based on how families currently farm and another based on modest levels of improvement to be expected with help of the extension service. We would look at cropping rotations, production costs, yields, and the going-prices paid farmers for their crops. Much of this part of the approach came from my experience in Peru. What I hadn't done there was to incorporate the concepts of carrying capacity or soil productivity. I applied my usual benefit-cost analyses to the foregoing information to select those areas most suited for cropping and those less so but still viable. The rest of the land we allocated to livestock and forestry. Our focus was rain-fed agriculture because irrigated farming in the area was not currently practiced, nor was it practical for us to propose.

To translate the results of these appraisals into a usable form, we turned to Scilley and Sketchley for their soil maps. I began coloring these maps according to the above uses but found doing so took up too much of my time. I asked Byron and Gichohi if they could assign someone in their group, possibly someone with drafting skills. But they refused out of hand. I got the feeling that they felt my presence was an unnecessary intrusion, that my presence in Nairobi was an intrusion. Perhaps my error had been not trying hard enough to make them part of our planning sessions. But then, I felt these two had enough work on their hands just managing the work of the other staff. So, whom did I turn to but Vicky as I had so many times before when I needed help.

Vicky joined me in the large bullpen where I worked, along with a British typist, a Kenyan typist, and a couple of counterparts. They were all welcomed Vicky. We learned that the British secretary had a quirk. When left for home, she lifted the rotating ball from her Selectric saying she didn't want anyone else using it. I found a table large enough for Vicky to spread out the maps where she could work. Once she finished the maps, I got her to prepare tables, scan and summarize data on farm income--just a lot of things. Much like the research assistants at SRI. Besides directing traffic and making the benefit-cost calculations, I used the universal soil loss equation to decide which hillside lands could be farmed without excessive erosion, and I boned up on eucalyptus farming, and terracing as part of erosion control.

One afternoon when I came into the office Vicky and the others were all chuckling. Vicky explained that one of the counterparts told the coffee boy to go into Sketchley's office to see if anyone was there. Soon, he returned saying there was no one. Being suspicious, one of the Kenyans checked to make sure. He came back laughing. When asked what was so funny, he said that Sketchley was indeed there. He then went on to explain. It is common for a tribesman to look for others of his own tribe. If he finds none of these, his reaction is "no one's there." So, for days we razzed Sketchley about being a nonentity.

Even though we were to be in Kenya for three months, I feared that I might not finish my responsibilities in time. As a result, Vicky and I would often come back to the office after dinner and work late into the night. Even so, all was not work. We would sometimes go out

for lunch or come back to work after dinner. One of our favorite downtown restaurants was the Red Bull near Parliament. The place was frequented by Kenyan professionals and an occasional white face. Another excellent restaurant was in the RR complex just downstairs from our office. The place reminded me of the dining coaches of years gone by, or the restaurants at the RR stations. Waiters were decked out in crisp white jackets, dark ties, and well-polished shoes. The food matched the elegance of the place.

Being pressed for time didn't keep me from jogging a couple of miles after work. My favored route would take me through our neighborhood and to a park with a soccer field. A group of Masai women often sat with their children outside the gate of lot nearby where their men were construction hands. The first time they saw me jogging they sniggered among themselves. Before long, they and their children would come out into the street and follow me down the road and howling with laughter. I'm wasn't sure what was so funny. Maybe it was my white legs showing below my shorts. Or, it could be the amateurish way I jogged, in comparison with Kenya's world-class runners.

After we had completed the maps we used a planimeter to measure the mapped areas according to their suitability for cropping, ranging from high, medium, and low, or their unsuitability for cropping. We next converted the measured amounts into the number of farm families an area could accommodate based on the Government's target income. Where the income was below the Government's target, we allowed for some mechanization or hired labor. We identified the areas that needing erosion control. In this way we evaluated all of the unused and sub-optimal land covered by the soil survey. Of course, we allowed for villages and other commercial areas already in use. Summing the net benefits from the potential uses, we compared them with the cost of moving farmers to the area, constructing supporting works, and the like. The result revealed the economic value to the economy, the net benefits to participating households, and the number of settlers the target area could accommodate. This latter measure was the heart of the government's proposed scheme for resettling highland farmers.

In the end we found that the target income for the number of farm families to be settled could not be met. The Government's proposed scheme was not viable! Suspecting that some

would not welcome our findings, we redid our analyses several times without materially changing our conclusions. Something had to give: fewer settlers, a lower target income, or the idea altogether.

Working alone late one evening I turned out the lights, secured the doors to our office, and got into our car. Aside from a night watchman the place was empty. Heading home I followed my usual route along Ngong Road, a well-traveled thoroughfare during the day. I had nearly finished the short drive home, and was passing through the stretch of an eucalyptus grove close to where I would turn off this artery. It was then that I realized a car had been following me. I don't know if the driver of the car had seen me leave the RR building or not. But the steady distance it kept behind me and the darkened windows made me suspicious. To get home once leaving Ngong, I had to make several turns down narrow, dimly lit roads. The car kept right on my tail throughout all this. *Now I was suspicious!* As I made the last turn a few hundred yards from our gate, I suddenly speeded up, honked the horn several times to alert the guard. He got the message and swung open the gate. I trove through and to the parking area beneath our quarters. The car continued on without incidence. Was this just a coincidence? I doubted it because hijacking, robberies, and assaults were common in Nairobi.

Even though I worked long hours including most weekends, Vicky and I were glad to be in Nairobi. After all, Kenya was an R&R country with its wonderful climate, game parks, beaches, good accommodations, and many first-rate golf courses in and around Nairobi. We joined the Royal Nairobi Golf Club not far from our maisonette and were able to play golf on several weekends. The Club was "Colonial British" with its pub-like bar, dart board, placards of past presidents, all in rich, dark oak, as well as a large veranda overlooking the eighteenth green. We made friends with some of the Brits and a few Indians who had settled in Nairobi.

Indian traders, shopkeepers, and professionals had been in Kenya for a long time, not just in Nairobi but elsewhere throughout Eastern and Southern Africa. Some Indians were third generation, others dating back even further. When Idi Amin expelled the Indians from Uganda, some other East African governments did as well, although not so thoroughly. The sad part of this expulsion was that many Indians had no place to go: they and their parents had made Africa their home. Of course, more recent arrivals might still have contacts in their homeland. While

disruptive, the expulsion for these Indians was not so severe. Indian shopkeepers on the edge of downtown Nairobi kept their traditions alive. Walking the streets one could see many women dressed in saris and men in dhotis. Should one enter one of their shops "just to look around" it would be difficult to leave without buying *something*. For the shopkeeper would plead that, "You are my first customer of the day. I must sell you something. Otherwise, I am likely to sell nothing the rest of the day." Though not being conned by this falseness, Vicky might still buy some trinket just to make the guy happy.

Especially at the outset I would relax on Sundays listening to the Bee Gees on our tape recorder, reading the Daily Nation that ran a series on Steve Biko, the South African political activist, as well as the account of how an injured pilot whose plane went down off Honolulu who fought off shark attacks and survived in the water for several days without a life jacket. Besides golf, Vicky and I occasionally played bridge with the Scilleys, and a few times we went downtown to a movie, a stage performance, or for dinner at one of the city's fine restaurants. Nairobi, in the environment in which we circulated, was as pleasant and exciting as one could wish. This is not to say that poverty was not grinding for many throughout the country. We often attended Saturday evening mass at the Catholic church a 20 minute drive away. Once we attended the services at the historic Episcopal church off Jomo Kenyatta Blvd.

The significance of this poverty and backwardness could sneak up on unwary tourists. I once had occasion to have lunch at the Intercontinental Hotel with Gideon Mutiso, a political science prof at the Univ of Nairobi. A beautiful, up-scale hotel located on a hill that offered a nice view of the downtown area. Looking over the menu, I ordered liver and onions. The professor leaned towards me and whispered, "I wouldn't do that. Better to choose something else." I knew about, but had forgotten, that Kenya's livestock population had its share of health problems, including liver fluke.

Despite the hard work and the problems of health and crime, being in Nairobi excited me. What made Kenya so interesting was the history of the place right up to the present time. Jomo Kenyatta, the leader of Kenya's successful rebellion against the British, was currently head of the government. I had read up on colonial East Africa before I ever thought I might be going there.

Books had included Mau Mau by Robert Raurk, Hemingway's Snows of Kilimanjaro and Green Hills of Africa, and Charles Miller's Lunatic Express that told about building the railroad from Mombasa through Nairobi to Kampala. Miller's book described how the Indian "coolies" who worked on the railroad were eaten alive by lions that broke into the RR's sleeping cars. Some of these books referred to the Stanley and Norfolk hotels. The former was in the middle of downtown, the latter across from the Univ of Nairobi. I had stayed at the Stanley to put myself in one of the places I had read about. This was the hotel with the tall thorn tree in the middle of its patio next to a busy downtown street. Customers, including prostitutes, would have a drink or something to eat while watching those who passed by. More interesting was the arrival of "safari" minivans that would pull up to the curb to unload its passengers. The vans painted with zebra strips looked as though they had just returned from a safari. Humorous to those of us who, after a few months, felt like old-timers. Perhaps we were, compared with those we were watching. Most would be decked out in road-rimmed hats, jackets, tan khaki shorts for the men and tan khaki skirts for the women as though ready for a safari. Dark-skinned Kenyan guides hovered over them.

Vicky and I were enjoying such a scene when Jerry Dekker, our old friend from Addis, pulled up a chair and sat down beside us. Pleasantly surprised we asked what brought him to Nairobi. He said he comes here often in his search for African artifacts. We invited him over for dinner so that we could continue our discussion and find out more about life in Addis. He told about the brutality of the Cuban-assisted, Marxist government: how children were asked to report in school what their parents were saying at home; and how in the mornings one often saw bodies scattered along the side of the road. On a more pleasant note, we saw Peter Ustinov browsing in the Hotel Stanley book store. We heard subsequently that he was on-location here for a new film.

The Norfolk was, to my way of thinking, the classiest hotel in Nairobi. Vicky and I managed to stay there during one of our trips and were not disillusioned: there was the elegance of the dining room with its white jacketed waiters, linen table cloths, and fancy cutlery. Outside was a large aviary with many verities of tropical birds set within the spacious grounds. When I was alone once I order a beer in the large, oak-paneled bar where only men were welcome.

While the place seemed dull it reeked of Colonial days. The next time I chose to have a drink at the covered patio next to the street and across from the Univ of Nairobi. It was so much more lively there, the clientele appearing to be professionals of some sort.

Vicky got along fine during our stay. When she was not working in the office for me, she shopped for groceries, converted dollars into shillings, looked after our travel arrangements, and other activities that allowed me to concentrate on my work. Once, she went to the open market to buy live crabs. At one stall the crabs scarcely moved. When Vicky pointed this out to the vendor, he said, "Oh, they've just passed out." So, Vicky went to the next vendor, where the crabs *were* active. When she knelt down to look at them closely, the vendor cried out. "Madam, do not touch. They can grab you with their sharp claws." Ignoring the warning, Vicky gripped one by the back of the shell near the head, the crab not able to reach her hand from there. Amazed, the vendor called to those around him to come watch what this crazy foreign woman was doing.

Another time Vicky was standing in line at one of the banks to convert dollars into schillings. The long line seemed to be taking forever. While waiting, in her usual friendly manner, she struck up a conversation with the man in front of her. He told her that he had been trying unsuccessfully to reach his home office. Vicky said, "You know there is a ten-hour time difference. It must be in the middle of the night. He replied, "Lady, I run a 24-hour business. Someone should be there all the time to answer the phone." She then said, "Why don't you relax and take advantage of this wonderful place? Go to the game park." "Look, he responded, "I can see animals at the Chicago zoo any time I like!" When she continued admonishing him about his impatience, that things in countries like Kenya don't run as smoothly as at home, he closed her off by saying. "Lady, maybe I just like to complain."

Once after getting the shillings she wanted Vicky and Scilley's wife were walking along a sidewalk when a street vendor showed them various trinkets, including bracelets he claimed were genuine elephant hair. Such bracelets were popular with the "in crowd" because they showed that they had been to Africa. When Scilley's wife said, "I'd like to buy one, but I'm allergic to elephant hair." "Oh, no problem, miss," he said. "I have a friend just around the corner who

sells only plastic "elephant hair" bracelets. Please wait, I'll be right back." Recognizing this scam for what it was, they walked on amused by the fellow's resourcefulness.

We had heard stories about Tree Tops, a popular resort where accommodations were built among the trees thirty feet off the ground. So, I encouraged Vicky to join Byron's wife and mother in going there. Vicky found the experience one-of-a kind. She said that it was customary to be awakened in the middle of the night by the ringing of a bell. She told of seeing an elephant shoving a large cape buffalo aside so that it could drink where the buffalo was drinking. Instead of giving way, the buffalo raised its head, hooked the elephant's long tusk with one of its horns, and jerked its head sideways. The elephant let out a trumpeting scream and scurried away. So much for the myth that elephants can go wherever and do whatever they want.

Occasionally, Vicky and I would get together for drinks and dinner with Charlie Hash and his wife. This was easy since they lived just across the street from us. Charlie liked to tell about his confrontation with a top sergeant who visited their unit. Charlie was serving on the chow line when the sergeant studied him for a moment then said. "Where is your name plate, soldier?" Charlie admitted to having forgotten to put it on, as required. The sergeant next said, "What is your name?" "Hash, sir," Charlie quickly replied. With that the sergeant, thinking Charlie was being insubordinate, grabbed him by the shirt about to drag him across the trays of food. But he stopped when those in line convinced the sergeant that Hash was his real name.

As my time in Kenya drew to a close, I was, as usual, working long hours trying to pull as much together as I could. In the end Charlie Hash was my major helper. Herb Fullerton helped a lot, but his time was up and he had to leave. AID was somewhat annoyed that we had not produced a final report by the time I left. Byron, thank goodness, stepped into the breech and said he would be able to complete the project report with his current staff.

During this last week, Vicky and I were in the office working late when the phone rang. Picking up the phone, I heard Bruce Anderson on the line. He said CID had joined forces with the Univ of Hawaii to bid on a worldwide study of farming systems research that directly

addressed the needs of small-scale farmers in the LDCs. Don Plucknet of Hawaii had written the response to AID/Wash's RFP. Being recognized as a leader in this type of research, it was no surprise that CID-Hawaii was the successful bidder. AID/Wash had told the two that they should prepare a plan of work and a budget. Once accepted, a contract could be drawn up and work begun. All had assumed that Don would head up the project. Although Don had indicated he would do that, he had since accept what he considered to be a superior offer. That left CID in dire need of a replacement. "Would I be interested?" I asked a few questions about what this entailed. Then I asked whether he thought I could handle th job. When he said, yes, I said, "Give me a few minutes to think about it. Don't hang up." I turned to Vicky to get her reaction. As usual she said, "That's up to you. I'm game if you are." So, I said, "Yes, I'd take the job." I had *no idea* what I was getting into. I knew literally *nothing* about agricultural research, but I did feel comfortable working in developing countries. It was a good thing I accepted, for that assignment was to be the most significant of my professional career.

When Vicky and I said goodbye to the friends we had made in the office, the two Kenyan ladies gave her a strip of cloth with an elaborate border at one end. These pieces are meant to be made into a wrap around skirt that was so popular at the time. The cloth was not cheap. And yet these two Kenyan ladies with their modest salaries bought it for Vicky in a expression of the friendship that had developed between them.

By Friday, Byron and I had briefed AID on the status of the final report and what was left to do. At this point I felt that my job was finished, having accomplished about as much as I could do. So, when the Hashes invited us to go with them to the Keekorok game park over the weekend we accepted.

To get there we followed the winding road that descended the escarpment into the Rift Valley. The tedious drive did not take more than a few hours, but it seemed longer given the straightness of the road and the lack of traffic. I did become suddenly alert when I realized Charlie had drifted over the dividing line as a car was rapidly approaching us. Charlie swerved back into our lane just in time. After that, I paid more attention to what was going on. We stayed in another of the country's beautiful and excellently-run lodges. The game was similar to

what Vicky and I had seen before. But always exciting. True to form, Vicky was able to spot game off in a distance that would rival that of our guides. Once, we passed a male lion resting on a mound by the side of the road not six feet from our land rover. With the side window open, we were so close that we could see the flies on the lion's muzzle. The other exciting thing we saw was the massive migration of wildebeest that occurs this time of year. They lopped along mostly in twos and threes at a pace that apparently they could maintain for hours at a time. The serpentine line extended as far as we could see in both directions

Returning home Sunday night, Vicky and I readied ourselves for the next day's flight. AID regulations prohibited us from using a foreign carrier, which was needed to reach Europe, and from there to board a US carrier to the states. So, we were forced to fly Pan Am directly west across Africa with stops in Kinshasa, Lagos, Ibaden, Monrovia, and Dakar—a veritable milk run. Only in Kinshasa we were able to get off the plane to stretch our legs. We bought a cheap wood carving that didn't come close to craftsmanship in Kenyan, just a souvenir from West Africa.

On the long leg across the Atlantic, I let out a sigh of relief. This had been a challenging experience, but I felt I had contributed a lot to a meaningful project. And I had learned a few things that I could use in the future, e.g., estimating sheet erosion using the universal soil loss equation, as well as more about forestry, and bench terracing. And, I had managed another interdisciplinary assignment, with challenges similar to those in Peru. Moreover, I had a challenging assignment ahead of me.

Pop Lynn and his new wife, Caroline, met us at the International airport on Long Island. We spent two night with them before making the last leg of our flight to Salt Lake City.

Months later when Howard and I returned to Nairobi to report on our study, I said to a group of about 50 that the semi-arid areas could not accommodate the Government's objectives either in the number of farm families resettled or the target income. When I finished my short presentation there was dead silence. I received not a single question, nor was I challenged. Offsetting this apparent lack of interest was the phone call Doug Caton made to Howard Peterson in which he supported our report and the comments I made at the meeting.

Family

What happened with the family through all this? Dad said the three boys behaved themselves and he had a good time. A few days after our return from Kenya, Dad drove back to Ft Collins. Becky having finished teaching in Stuttgart toured Europe using the Euro Rail pass we had given her for as a graduation present. Paulo had finished just one year in Logan high school and flew to Europe to see the sights. He met up with Becky briefly while there. Becky told us she was headed for the Peace Corps. She was to end up in Lesotho where she stayed for five years. She spent the last two years teaching in the Lesotho system, having met David, her husband-to-be, just as she was finishing her third year with the Corps. Tim had made two trips to Bela Horizonte, Brazil renewing his friendship with the two students who had briefly stayed with us in Fort Collins, and making new friends—both boys and girls. He chose to go to Fort Lewis College in Durango where he majored in history and political science, wrote for a school publication, and acted in plays. Mike finished high school at Logan and enrolled at Dixie State College, in St George, Utah "majoring in golf." That experiment didn't last long. Paul was still in high school, so he remained home with us.

Newport

The day after our return from Kenya, Bruce suggested I look over the AID/Wash's RFP concerning the FSR project and the CID-Hawaii proposal that AID had accepted. Two days later the family and I were off for a Trustees' meeting in Newport, Oregon. Since we had been away from the family for so long, Vicky and I thought it would be nice to drive there with our three boys. It was an easy two-day drive, the weather was nice, and the scenery beautiful. Along the way, I mused over my accomplishments since joining CID thirteen months ago. I thought I had proved my worth as Deputy Director: in CID's internal review of its Chad project; in securing the project in Peru; in directing the effort that gained the Egyptian cereals project; in jointly writing a proposal in Paraguay; by troubleshooting in Kenya and Honduras; and just recently by taking leadership of the FSR project. I expected some approbation from the Trustees over these accomplishments, although, I wasn't going to seek it overtly. After completing the tough Kenyan assignment, I was riding high.

Imagine my shock when, during the initial Trustees' meeting, I learned that I had been removed as a CID officer! The reason, Bruce said was that the Board considered me to be a problem. How can that be? No one on the Board had conveyed any such feeling to me. Moreover, Howard Peterson knew my work and had said nothing to indicated I had caused trouble. Neither had Bruce. I figured that Larry might have resented my position. But, what did that matter? My mind was in turmoil. Back in our motel room I grew dizzy as the room began to swirl around me. I lost my balance and fell; the bed softened the fall. Luckily, no one saw this happen. That evening I met with Bruce and those Trustees most interested in the FSR project. What we discussed, I don't know. My mind was still reeling. By noon the next day, the meetings were over. By now I had bought into CID. When the next Trustees meeting was scheduled for Core de Lane, I had been left out.

Even though I had thought of putting this rejection out of my mind, I couldn't pull it off. As we drove home, I probed my mind over what had happened since joining CID. I considered that Larry was the culprit. He had skipped my initial interview with Bruce. During my first sit-down discussion with Larry he had ended by saying "You're either on my side or Bruce's." I recall thinking that Larry was a guy I needed to watch. I did have trouble negotiating the Peruvian project, but that was one of a kind for CID and for me. Had Larry purposefully stayed away from delivering a contract to Ortega when he had a stopover in Lima? Well after major issues with the Peruvian project had largely resolved themselves, Bruce was going to send me to Niger to negotiate a contract there but caved in when Larry strongly objected. By then Bruce apparently had concluded that I had done a reasonably good job in negotiating the Peruvian contract.

As telling as anything, Ev Richardson grew cool towards me after awhile. I suspected, but never tried to prove that Larry had been working on him as well as the trustees on the Finance Committee. Having concluded that all this was "water under the bridge," I still fretted for the next six months. In the end, my removal as an officer didn't really matter because the FSR project was to be more rewarding than continuing with CID, as Howard had said.

Return to Peru

Once in Logan I turned my attention to Bob Longenbaugh. He was unhappy about what was going on in Peru and the little help he had received from the CID office. The major problem had to do with Max Williams, the chief-of-party. Ortega had been complaining to Bob about CID's input. This wasn't the first time Bob had complained to me. He said he wished he had never taken the job. I liked Bob both professionally and personally. During one of our session, over lunch, I told Bob that this is just the way development works. You've got to roll with the punches. You said you were interested in working overseas. This is what it's like. In time, you'll look back and laugh about these problems." "That'll be the day," he replied. With some of the more urgent problems identified, we decided that the best thing for us to do was to go Peru and deal with them directly.

Right off the bat, Coronado said he was dissatisfied with both Max and Ott. By comparison, he said that Leroy Salazar was doing a great job, despite the earlier objection due to his name. Recall that they had said that there a had *lots of Salazars* in Peru who wouldn't cost so much. They especially liked it that Leroy lived simply in the Montaro Valley, knew irrigated agriculture as well as other aspects of agriculture, helped the engineering students from there write their senior papers needed for graduation, and was accustomed to rising early in the morning and working late at night.

I don't recall if the complaints against Max were related to his technical ability or not. But he and Ortega apparently did not get along when it came to coordinating CID's vs ATA-Class's inputs. Besides, a triviality had soured their personal relationship. Ortega had arranged for Max to hire Ortega's cousin to be his secretary: probably not a smart move on either one's part. Then, Max bought a refrigerator from the cousin for \$200. After hooking it up his Max's wife, Barbara, was not satisfied So, Max refused to pay. This feud was going on when we arrived. To get that issue out of the way, I simply pulled \$200 from my pocket and gave it to the secretary. Just to shut them up. Max's wife remained unhappy and wanted to go home. Eventually, we persuaded Coronado to let Gene take over as the team leader, but leaving Max to complete his time in Peru. With that straightened out, Bob and I returned home. I don't know how this contract turned out.

Years later, I returned to the Mantaro Valley in Peru to give a short-course on project analysis, similar to my lectures at CSU. At the end of the course, Coronado threw a party for the attendees, others funding the course, and myself. He and I had a good talk. He said he was glad that I had agreed to give the course, but made no mention of his earlier problems with CID and ATA-Class. By chance I met a USU extension agent who was working in the Valley. He said his presence was a continuation of CID's involvement there. At this point I realized how little I knew about the important role of extension was to be for *Plan Meris*.

My last evening in Lima was particularly enjoyable. Ortega and Lizarte invited me to go to La Granja Azul (Blue Farm) with them and their wives. This was a popular open-air dinner-dance place several miles beyond Lima's city limits. The air was balmy, the weather just right, the dinner good, and the dance band playing Latin American music was exciting. So, over good wine we ate, talked, and danced without rehashing the CID/ATA-Class contract. I don't know if this was a peace offering or not. But if it was, I gladly accepted. For we all had a good time. Or, maybe the CID connection had not been so bad after all.

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Chapter 12 Farming Systems Research

When our family departed for the Trustee's meeting in Newport, I knew very little about the Farming Systems Research project that I was to lead. Bruce had spent little time describing FSR or what my responsibilities would be. I had accepted the position "on faith" since Bruce had said he thought I could handle the job. Nor did I learn more about the project during the two days I had been in Logan before leaving for Newport. When Bruce and I met with those Trustees who were interested in the project, I had little to offer. Besides, my mind was still reeling from my removal as a CID officer.

Thus, my first task upon returning to Logan was to learn what the FSR project was all about. Why had AID/Wash issued the RFP regarding FSR and how was it that the Univ of Hawaii won the bidding? I learned that the project had its origin during the last century over the anticipated world food crisis suggested by the Malthus-Ehrlich debate. Before long, two International Agricultural Research Centers had made great strides in addressing the need for greater food production. These were the International Maize and Wheat Improvement Center in Mexico (CIMMYT) regarding wheat and the International Rice Research Institute (IRRI) in the Philippines regarding rice. In 1971, the World Bank created the Consultative Group for International Agricultural Research (CGIAR) to support and coordinate the efforts of CIMMYT, IRRI, and other International Agricultural Research Centers around the world. Complementing this group were the National Agricultural Research Centers in El Salvador, Guatemala, Indonesia, Senegal, and elsewhere.

Eventually, CGIAR, and others, concluded that these increases in crop yields exceeded the capabilities of most small-scale farmers in the developing world. Something needed to be done. The two colleagues addressing this challenge were Ken McDermott, senior agricultural officer with AID/Wash, and Don Plucknett, AID's former Chief of Soil and Water Management and, subsequently, Senior Scientific Advisor on International Agricultural Research at the World Bank, as well as faculty member at the Univ of Hawaii. They found that a dozen or so individuals across the developing world had been making progress working with small-scale

farmers. They became intrigued by the idea of "harvesting" the knowledge they had come up with. Their idea was to bring this small group of researchers together to learn what they had done, synthesize the results, and write a "manual." Ken converted the idea into an AID/Wash RFP and Don wrote the winning proposal. The association between Ken's request and Don's response was so close that this could be considered non-competitive bidding.

CID became involved through the Univ of Hawaii, which was one of its members. The Univ of Hawaii could very well handle tropical ag research, but not what was going on elsewhere around the world. So this was a "joint-venture" with Plucknett covering for the Univ of Hawaii and Bruce for the other the CID universities. Then a strange thing happened. Don, who would naturally be the team leader, given his involvement, dropped out.

Unbeknownst to the others Don had been waiting silently for his nomination as a member to the prestigious Board for International Food and Agricultural Development (BIFAD) to clear. The Board was created in 1975 under Title XII (Famine Prevention and Freedom from Hunger) of the Foreign Assistance Act. The Board's primary purpose was to advise the AID Administrator on agricultural development priorities. The seven BIFAD members, at least four of whom would be from the Universities, are appointed by the President. The intent was to couple AID's interests and responsibilities with the capabilities of the agricultural scientists at U.S. universities. Title XII's purpose was to strengthen land-grant universities and other institutions to improve agricultural sciences so as to increase world food production. Little wonder that Don could not turn down this prestigious opportunity, which he might not have known about when he first became interested in FSR.

Given Don's prestige and the positions he had held, how could I have been considered as his replacement? It must have been out of pure desperation. Sure, I had international experience on agricultural projects and could work across disciplines. But I had no experience and little understanding of agricultural research of any kind. *I didn't even know the Centers existed!*

By the time the Advisory Committee arrived in Logan two weeks after Newport, I was ready. I had improved my understanding of FSR, the Univ of Hawaii's proposal, and how CID had become the sole contractor dealing with Ken McDermott. The half-day meeting came off smoothly enough; its main purpose was to get to know each other, learn of each other's interests, and trade ideas. Again, Bruce led the discussions. Seven CID universities made up the Advisory Committee. Their alleged purpose was to advise me on research methodology and monitor the project's progress. By now they must have learned what a novice I was regarding FSR.

Following this meeting, I got down to the serious work of revising the original proposal. Originally, Don proposed writing FSR guidelines for each of three regions: one for Asia with its rice-based cropping patterns, one for Africa with its casava and cattle operations, and one for Latin America with its maize, bean, and potato patterns. The approach was to consider research at the CGIAR Centers but with a focus on small-scale, limited resource farmers. Now, my task was to select a research group that would be responsible for each of these regions. The researchers would need to spend enough time in each region to gain a clear understanding of small-farmers' cropping patterns, farming practices, family characteristics, markets, and so forth. Costing all this in terms of salaries, travel, per diem, our administration, and printing the three guidelines, I came up with a figure of \$1.3 million.

When Bruce and I met with Ken in his Washington office he right away said that the amount of our proposal exceeded what he was authorized to spend, which was no more than a million dollars. That changed things and by the time we left we had worked out an alternative. This would be to produce a single set of guidelines, the idea being that the approach to FSR can be generalized and that the conditions unique to each of the three regions handled as modifications. This approach allowed the number and composition of our research team to be reduced and be directed from CID's Executive Office. With Bruce's approval alone, I sent these revisions to Ken, which he approved. That being out of the way, I was off to the races.

My first order of business was to persuade two others to become co-authors with me. Bruce and I had settled on the need for one each from the natural and social sciences. I

immediately thought of Bill Schmehl as my choice for the agricultural scientist. He was an agronomist specializing in soil science. I knew him to be a rigorous scientist from our association in Cairo. Besides his competency and motivation I liked his sense of humor. But I didn't know if he would be willing to devote two years to our study. Bill said he must think about it.

By now, I had decided that one of the co-authors should be from the Univ of Hawaii simply because Plucknett had written the winning proposal. I thought CID owed the University as much. I contacted Peairs Wilson about making arrangements for me to come to Honolulu in search of a social scientist, or a natural scientist should Schmehl decline that position. After a couple of days I narrowed my selection to Perry Philipp, an economist with extension experience, and Walker, an agronomist. Before I left I asked Peairs which of the two he favored. He said both were well regarded in their fields, but he thought Perry would be the more loyal of the two. On my way back to Logan I visited New Mexico State Univ and the Univ of Arizona to see who was interested there. If I could get both Perry and Bill on board I would not need my contacts there.

Earlier, on my return from a trip to South America, I had stopped in Guatemala City so I could meet Pete Hildebrand, who Ken had suggested. For years Pete had been advising the Agricultural Science and Technology Institute (ICTA), a national research organization, whose work with small farmers had become widely known. When I called, Pete said he was extremely busy arranging for a training session in the highland area, but could spare me an hour. Pete told me a lot about his concept of "recommendation domains," areas in which farmers' cropping patterns, practices, and resources are clearly defined and similar enough that researchers can propose a single set of recommendations. Pete sparked with enthusiasm as he described what they were doing and the progress they had made. During our meeting I learned that Pete had received a degree in Animal Sciences from CSU and that he occasionally passed through Ft Collins on his way to his cabin in Poudre Canyon.

As we parted Pete told me that he and his wife would be staying at their cabin on a short vacation next month and be would be glad to talk some more with me and Bill Schmehl. So, I

arranged with Schmehl to meet Pete, who was as engaging as ever in telling us about his years of work in Guatemala. Bill came away fully convinced about the importance of this new approach to research and the contribution our project might make. On our drive back to Ft Collins Bill said he had been swayed. He wanted in. Great! I could now go back to Peairs Wilson and tell him that I wanted Perry Philipp as a co-author if he was still interested. Perry was and the makeup of our co-author team was determined. When I phoned back to Gerry Burke at New Mexico State he was upset that I had not selected someone from there. He also was annoyed that I had not cleared this decision with the Advisory Committee reminding me that he was now Chairman of the CID's Board of Trustees. While he didn't say as much, I sensed the threat.

In mid-October, Bruce told me he wanted me to work full time on FSR, since CID policy does not allow contracts to be run out of the Executive Office. He said that he had arranged for me to join USU's the faculty of Ag Engineering headed by Al Bishop, the father of Bruce who was my classmate at Stanford. That suited me fine since it relieved me of much of the busy work as Associate Director. Besides, I knew and liked Al. Then, I thought. Bruce, having been with CID from the beginning, knew that I could not lead the FSR project while being the Associate Director. Pretty smooth, I thought.

Now that I had identified the other co-authors, Ken thought I was ready to meet Colin McClung,¹ president of the International Agricultural Development Service (IADS) in New York City. Because of his association with CGIAR Colin knew about the research centers and strongly supported our FSR project. He knew Plucknett and how I became the team leader. So, I had little explaining when introducing myself. Among other things he gave me the names of about ten individuals who were making great strides in research suitable for small holders. He knew about Pete's work in Guatemala and told me of Dick Harwood's multi-cropping work in Southeast Asia. He said he would persuade Dick to meet with us, although Dick was pressed for time at the moment. Time flew by for me, since I was getting so much information. But as I was leaving, he looked at his watch and exclaimed, "My god, you've been here two hours." I did not take that as a compliment.

¹ Colin was to receive the 2006 World Food Prize for helping transform large areas of aluminum-toxic soils in Brazil into fertile crop land.

The next day I took the commuter train to Washington, D.C. where I sat in on one of CGIAR's meetings. There, I was able to observe the largest group of big names all in one place that I had ever experienced. Besides a World Bank executives whom I recognized, there was David Bell, Art Mosher, William Furtick, Bob Havener, and Don Plucknett. The discussion focused mainly on funding for CIGAR's Research Centers. It was nice to be there, but unnerving that our project dealt with a subject of interest to so many eminent people.

That evening I bumped into John Fischer in the second-rate hotel where we were both staying. He said he had grown disillusioned with CID and was planning to resign his position as Coordinator for African and Asian affairs. I didn't tell him about my struggles there.

My next important meeting with the Advisory Committee came ten days later. Perry and Bill had come to Logan a day early to help prepare for the meeting. Ken had already flown in and Advisory Committee members were to arrive the next day. We met as a group the next morning. In the afternoon, Perry, Bill and I traded ideas about how the meeting went, and that evening Vicky and I invited them to our house for dinner. After desert and over coffee we continued our discussions. At one point I made some vague reference to "the Centers" and Ken wanted to know which "Centers" I was talking about. I meant those of CGIAR, but wasn't sure what he was talking about. Somehow I extracted myself from this embarrassment by talking less and listening more. After the meeting I confided in Perry and Bill that I felt Ken and I were on different wave lengths. Then I thought, if I could just have enough time, I might catch up just as Sherm Clark would do.

Administratively, I had to prepare job descriptions, budgets, and contracts for Perry and Bill. That done, I began planning a trip for the three of us to see firsthand how the institutions and researchers were addressing the needs of small farmers. Ken gave me some names of people to contact. Where these were lacking, his office gave me information about the relevant institutions. I arranged for most of these contacts by phone or cable; when this didn't work I wrote letters. Once our itinerary was determined I set about getting visas. Just a lot of detail.

Normally, I would have turned much of this work over to an executive secretary. But I didn't have one. When I moved from the CID offices to Ag Engineering I lost my own secretarial support. In time, I prepared a job description for the type of secretary I wanted: someone who could set up meetings, arrange for visas, as well as type. Salary level was not an issue because the FSR budget sufficiently covered this position. USU's Administrative Office cleared my request and advertised the position. After a few false starts, Maureen Seidman strode confidently into the room. She was moderately tall, slender with good muscle tone, and neat with well-groomed hair She told me of her experience as an executive secretary, said her typing approached a hundred words a minute, she took dictation, and was used to administrative detail. She agreed to the salary I offered her. When I asked her why she had left her last position, she replied, "Because my boss liked my sweet ass!" My eyes must have bugged out and my mouth dropped open. But I recovered, told her that she qualified, and wanted to check her references. I would get back to her soon. Well, I thought I had myself a talented secretary. Then, Administration called saying that my position did not qualify me to have an executive secretary. I had to be at least a Department Head for that to happen. I did my share of grumbling after that settling for what I could get. In frustration, I turned to Vicky for help when I ran into a bind. I never thought of putting her on the payroll. I don't do nepotism. So, she was a "volunteer."

By the first of the year we were ready for our trip. Perry, Bill, and I would meet with Bob Havener, Director of CIMMYT in Mexico, Pete Hildebrand with CATIE in Guatemala City, those with the Univ of Florida advising CENTA in El Salvador, Mariano Contreras a Cornell graduate who was head of farmer-oriented research in Honduras, and Bob Hart of CATIE in Costa Rica. With this all worked out, we headed for Mexico City. That evening, Perry asked me if I was nervous about our first meeting tomorrow. I confided that I was.

The next morning after breakfast a CIMMYT driver picked up Perry, Bill, and me and drove us to CIMMYT well beyond the outskirts of Mexico City. As we entered the main gate we thought we were entering a national park. The grounds so expansive and well kept. Trees lined the road up to the Headquarters. Off to both sides we could see rows upon rows of cropping trials with small placards describing what they were. (Thinking back, this was the first

time I had visited an experiment station, since the one near Debre Zeit in Ethiopia; and, then, I paid little attention as Clancy Miller visited with the station manager.) The driver let us off at the Center's expansive headquarters that reminded me of a Colonial hacienda. After we signed in one of the Center's many hosts showed up with our itinerary for the next two days. So many visitors come to the Center, important and otherwise, that they were well prepared for us. It's their way of spreading word about what has been accomplished here. And that is a lot. Norman Borlaug won the Nobel Peace Prize for his breakthrough research in high-yielding, disease-resistance wheat varieties.

During the next two days, the three of us met a lot of scientists dominated by plant breeders, for that was the Center's focus, and visited lots of experimental plots. Our most exciting interview was with Don Winkelmann. Besides his normal responsibilities as chief economist for the Center, he was one of those pointed out by McClung, who had been interested in the way small-farmers could benefit from CIMMYT's work. We listened intently and when we asked if we could come back to him for further help, he said, "Gladly." Don, with a PhD in agricultural economics from Iowa State Univ was tall and handsome with a charming smile; his gift with words charmed us. With all that, a sadness hovered over us. There on his wall was a 10"x12" picture showing his three good-looking children and his now-divorced wife. He had so much going for him, save that.

The second day, we were fortunate to meet Ernest Sprague, Director of the Maize Program. He had just flown in from Europe, had a few days at Headquarters, and was flying to Cairo in two days. I don't know how he handled such a schedule. Even so, he spent the better part of one day driving us to one of his on-farm, maize experiments and a training center in Poza Rica, a three-hour drive to the east. We eventually learned that on-farm trials are at the center of FSR, provided they were designed to learn how crops and practices mesh with the farmer's interests. In contrast, "station researchers would studying how some new crop variety might perform in the farmers' environment (soils, weather, practices, and the like) simply to learn more about the variety, rather than how the variety fits into the farmer's system. FSR was a shift from a scientific focus on a crop, livestock breed, or practice to one concerned about the

farmer and his family.² We surmised that Sprague was interested in the farmer as well as maize varieties.

Another memorable moment was when Robert Havener, CIMMYT's Director General, and his wife invited us to dinner at the Director's residence. The residence gave even more evidence of the Colonial past, with its heavy oak beams, rounded porticos, and adobe brick walls. Bob showed considerable interest in our work, since it was a form of reaching a different clientele. He said he would be glad to work with us, if the opportunity arose. He asked Perry about his work at Hawaii and Bill about his beet sugar trials at CSU. And, because his wife was there our dinner talk was not limited to our work. As we were leaving I wondered if Bob remembered my visit at the Ford Foundation. Unbeknownst to us, his wife was terminally ill at the time.

Early the next morning we flew to El Salvador where we met the staff at CENTA, the national agricultural research center located about 25 miles outside San Salvador. Amaya, the leader of the Center's FSR activities, told us about its program after which he drove us to four on-farm trials: one "up-land" (non-irrigation), two irrigation, and a failed pest control trial. Perry, Bill, and I concluded afterwards that trails should remain on-station until success can be assured. Small farmers should not be subjected to trials that fail. Frank Calhoun, leader of the Univ of Florida team advising CENTA doubted that FSR would succeed. Consequently, the team had been focusing its attention to traditional, on-station research and leaving the center's FSR team to fend for itself. We finished our visit by copying CENTA's annual reports, unpublished documents, and trial data. That evening we attended presentations on FSR by CENTA staff, Robert Moffett of AID, Arze of CATIE, and a representative of IICA (Inter-American Institute for Cooperation on Agricultural) whose headquarters were in Wash, D.C.).

The next day we took the short flight to Tegucigalpa where an AID representative met and drove us to Comayagua, 50 miles northwest of the capital. There we met Frank Peairs, an

² I use the word, *his*, intentionally.

entomologist and Franklin Rosales, a plant breeder both of whom were members of a six-man team now in its second year working on a multi-disciplinary approach to FSR. The team was led by Mariano Contreras, a plant pathologist from Honduras. The idea behind the team's approach to FSR had its origins at Cornell Univ. There, Mariano, Frank, and Dan Galt, the economist, along with PhD candidates from Colombia, Zambia, and Malaysia wrote a common thesis on FSR. CIMMYT allowed the team to use its data bank and the Rockefeller Foundation helped with the funding. The reason for calling their work multi-disciplinary was that, while collaborating with each other, each candidate had to produce his own dissertation. An interdisciplinary approach, such as the one we were undertaking, produces a single outcome in which the contributions of each member are lost in the process. This doesn't work in an academic setting. Even so, such a collaborative approach to writing individual dissertations was unique.

Peairs and Rosales told how their team came into being. After gaining his degree Mariano returned to Honduras where he persuaded the National Agricultural Program of Research (PNIA) to allow him to establish an FSR team. Galt and Peairs soon joined him. Three others completed the six-man team; their disciplines being agronomy and plant and forage breeding. The latter coordinated the team's training program. Peairs and Rosales then drove us to view some of their on-farm trials. Later in the day, they told us about some of the important elements of their approach to FSR. These included identifying similar cropping patterns and farming practices, on-farm trials, questionnaires, allocation of family labor, crop consumption and sales, and record keeping.

We spent the next day at the Agricultural Technology School in Zamorano where we met Mariano Contreras who was the School's director, and part-time lecturer. He was tall, slender, in his thirties, and charming. He told us how the school's combination of studies and practical training had produced some of Latin America's agricultural leaders. It was easy to see how he had convinced AID to fund his exploratory work in FSR, for PNIA to go along, and for two of his Cornell classmates to join him in Honduras.

We flew to Guatemala City the next day where we shared an ample two-story apartment (not at our choosing, but that was all that was available). The next morning as we were getting dressed, I noticed that Perry in tying the knot to his tie was going to have *far* too much in front and just a stub for the other part. He looked at me quizzically as much as to say, "What's the problem?" then simply stuffed the lower part of the tie under his belt and down his pant leg. I about flipped. We made our official contact with AID through Carl Koone, whom I had met the year before. He introduced us to Segara of IICA, then to Bresinne at the headquarters of INCAP (Institution of Nutrition of Central America y Panama). Bresinne told us about the Institute's work with child nutrition. What we found fascinating was a study they conducted that allowed small children to choose without restriction the proportion of maize and beans they wanted to eat. The researchers were amazed to find that these children selected the optimum nutritional amounts of both items.

In the afternoon an AID employee drove us to Quetzaltenango, the country's second largest city located in a mountain valley 7,500 feet high with an Indian-mestizo population approaching 100 percent. Pete was there with Ortiz, Technical Director of the ICTA's FSR program. After Ortiz's introductory remarks, team members presented their research findings. Ortiz, a Guatemalan who looked to be in his early thirties, had recently completed his master's degree at the Univ of Florida at Gainesville then returned home to continue working in small-scale agriculture. After the presentations Pete introduced us to Ortiz, the local team members, and Maria, a young and pretty Guatemalan sociologist who Pete eventually married.

Some of the slides used in the presentations showed small plots planted in maize with shoots sticking up amid rocks the size of footballs on land so steep that mechanization was impossible. Such photos brought home to Perry, Bill and me, the wisdom of agricultural research focused *directly* on farmers' conditions, thereby departing from the type of research typically conducted research stations. By now we had accepted Pete's concept of *recommendation domains* and his reliance on what he called *sondeos*, a survey approach aimed at conditions within these *domains*. Once the *domains* are identified interdisciplinary teams collaborate with cooperative farmers in the on-farm trials. Researchers might also conduct on-station trials in support of the on-farm trials. While a maize breeder might test a new variety

on-farm to see how it performs under less than ideal conditions, an FSR researcher would test how a maize variety fits into the farmer's cropping pattern, and learn what the farmer thinks about that fit. Truly exciting, we thought, yet simply good research methodology. Back in Guatemala City over the weekend, we met with Pete for a couple of hours then retired to our hotel to record and think about what we had seen.

That next afternoon we flew the short distance to San Jose, Costa Rica. Murphy, our AID rep there gave us a good briefing before driving us to Turrialba, which was the headquarters for CATIE. Although the trip was only 35 miles, the forest setting was a huge contrast from the colonial city of San Jose. My recollection has us driving through the gate and down a gravel road to a large, single-story building, the type one might expect to find in a US natural park. CATIE receives a stream of visitors due to its research and training in tropical agriculture. So, we weren't surprised that the Head of Public Relations had organized a slide show for us about CATIE's wide-ranging activities. These included tropical agriculture, agronomy, plant pathology, dairy, livestock, forestry, pest management, ecology, hydrology, soil science, natural resource economics, and so on.

That evening the Director of CATIE threw a reception for the three of us along with a visiting team from Iowa State Univ. I found it interesting that my path would cross with that of ISU in Peru and now here. And to think I left Iowa in search for international opportunities! During the reception we asked the Director if Bob Hart was there. He was and the Director introduced Bob to us. Bob had been one of those McClure had suggested we meet because of his meticulous work in defining the wide array of systems especially that relating to the environment. Bob looked about thirty years old, intense, and modest in demeanor yet he gladly talked to us about his work in Central America. He could switch from English to Spanish in mid-breadth. Bob had grown up in Latin America the son of missionary parents, which explained his fluency in Spanish and his career choice.

The next day we met with researchers in weeds, entomology, livestock, range management, forestry, and systems ecology. Once the three of us were alone after dinner, Bill explained to Perry and me concepts underlying agricultural research design and statistical

methods. This was new for me and a refresher for Perry. By now we were getting to know each other better. In proposing the three of us make this trip together I had wanted us to have a common background in FSR, and this sort of collaboration. My exposure to such a wide array of topics could have been overwhelming had it not been for Bill and Perry being present.

We gave our thanks to the Director for the program he had set up for us and the time CATIE's researchers had spent with us. Don Fiester, whom I had met in Guatemala, drove us back to San Jose. Being an old hand with AID Don said he was a strong supporter of FSR and our study. He drove us to the AID headquarters where we met two representatives of IICA and another representing the Agricultural Information Program for the Central American Isthmus. We already knew something about IICA's work, but the latter was new to us. The rep told us about the large data collection exercise his group had undertaken using sample frames (a subject new to me then, but one I would learn about). Compared with our focus on limited amounts of information *directly* relevant to FSR, we felt this exercise could end up with so much data that their usefulness would be out-of-date by the time the processing was done. Feeling we had been satiated with information about FSR over the past three weeks, we gladly headed home.

Back in Logan I reviewed and summarized my notes on our trip, talked with Perry and Bill by phone, made another trip to Peru, and stopped off in Colombia to visit the International Center for Tropical Agriculture (CIAT). My two-day visit there mirrored the meetings the three of had in Mexico and Central America. So, no need to repeat my contacts or sequence of meetings. There were two differences however: one, I attended a gala reception and dinner for CIAT's Board of Trustees, who had flow in from around the world and the other was the on-going insurrection that had been going on in Colombia for years. The researchers with whom I talked made no mention of this fighting. They either had became accustomed to it or perhaps most of their work was on the station where they resided. All remained calm. I'm reminded of the description of guard duty: it's one long stretch of boredom, interrupted by short spurts of stress, even panic.

Returning to Bogota, I was warned to stay in my hotel room except for meetings, since tourists are sometime abducted and held for ransom, even killed. But few tourists visit Bogota.

Ignoring the warnings I put on a suit and tie, and left the hotel to stroll along the downtown streets. I figured that if I looked ahead and strolled as with purpose I would look little different from many others on the street. Since Colombia had a considerable population with European ancestry, I figured that, with my modest tan, I would blend in with those around me. Which must have been the case, because no one bothered, or even looked at me as far as I could tell. Before arriving I had written to Carlos Rodriguez, a PhD candidate whom I had advised at CSU. He and his wife showed me the city's historic buildings of the Simón Bolívar's era, which were all lit up by dozens of flood lights. Carlos had no compunction about parking the car and visiting one of the museums there. All seemed calm and orderly.

Cornellia Flora, professor of sociology and extension at Kansas State Univ, and I had met at some of the FSR gatherings. So when we found that our interests coincided and that we would be in Colombia at the same time, I asked if I might tag along when she visited one of the country's extension projects. We could trade ideas about FSR during the trip. She agreed. We flew to Pamplona in the mountains northeast of Bogota to visit a regional extension center that was part of a large small-farmer program. We even jogged together early one morning while there. Later, an extension driver picked us up at our hotel and drove us some fifty miles into the countryside, with its scenic green mountain vistas, where we meet Armando, the team leader of the extension program. While their program was extension, rather than research, the target farmers and overall goals were much the same as those of FSR. Armando described the program then referred to an approach they called "heads and tails." The idea of the approach was to study the area's leading and lagging farmers in terms of their crop yields, incomes, and social standing. Analyzing the data they collected through statistically valid surveys, they searched for key factors, such as differences in soil types and slopes, and other factors, that divided those who were successful from those who were not. This was just another example of trying to help small farmers.

Back in Logan, I devoted much of the next seven weeks getting ready for our next trip. This time the three of us would scatter to the "three winds"—east, south, and west. By now we had learned enough about FSR and each other that we could proceed individually. Because of Perry's familiarity with Southeast Asia, he would visit IRRI, the Asian Vegetable Research and

Development Center (AVRDC) in Taiwan, the Central Research Institute for Agriculture (CRIA) in Indonesia, and the national research program in Thailand. Bill would visit the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India and the International Center for Agricultural Research in Dry Areas (ICARDA) in Syria. And I would visit the International Livestock Center for Africa (ILCA) in Ethiopia, the International Laboratory for Research on Animal Diseases (ILRAD) in Kenya, the International Institute for Tropical Agriculture (IITA) in Nigeria, the Senegalese Institute for Agricultural Research (ISRA), the West Africa Rice Development Association.(WARDA) in Liberia, and the Brazilian Agricultural Research Corporation (Embrapa) in Brazil. All told we had individually or together would visit all of the CGIAR centers of relevance to our study, as well as the national research institutions that had come to our attention. By the time we completed these visits we would be about as up-to-date on what was going on as we could be—all within an eight-month period that started with my visits to the International Potato Center (CIP) during one of my visits to Peru as well as my visit to CIAT.

Both Perry and Bill were upbeat about their trips. In Bogor, Indonesia Perry found good information from Suryatna Effendi and Jerry McIntosh, who had spearheaded cropping systems research with small farmers, so good that we included them to the August meeting. Research in Taiwan included that headed by J. C. Moomaw of AVRDC, which had collaborated with Dick Harwood. I never challenged him, but I think Perry's trip to Chiang Mai Univ in Thailand, was to visit a former PhD student. Bill told of Bert Krantz at ICRISAT, whose name had come up several times, and how Indian farmers who lived in small villages farmed small plots outside the village. Krantz had identified a leading farmer who was participating in their trials. Their driver parked at the side of the road to let Bill and Krantz got out and walked about fifty yards on wooden planks over a borrow pit to the farmer's house. That pit, filled with water from the rainy season, provided a wallow for the villagers buffalo. The farmer they were seeking welcomed them into his modest mud-wall abode. Then, as a good host, he asked if he could brew them a cup of tea to which Bill and Bert accepted. The farmer lighted the propane stove, took up the tea kettle and started out the door to fetch water from the borrow pit. Bill said he nearly panicked as he tried to reverse their decision to drink the farmer's tea. Somehow he convince him that he suddenly wasn't thirsty. With the possibility of dysentery a constant

companion on trips like these, that cup of tea could have done Bill under. Bill had dodged a bullet.

On May 8, 1979 I caught an early flight for Salt Lake City out of the Logan airport. Once over the pass leaving "the valley," we flew south along the mountains in complete fog without seeing the ground the mountains to our left. What a way to begin a journey. I held my breath till the weather cleared enough for us to land. From there on the trip was smooth sailing. I arrived in Nairobi at 1:00 a.m. the next day. Checking into AID the next morning I learned that my letters had not gotten through. So, I got on the phone to arrange a meeting with ILRAD that same morning. We talked about rinderpest, hoof and mouth disease, and the devastation caused by the tsetse fly in a wide swath across the Continent. I met with Mike Collinson in the afternoon. He was expecting me, since my contacts with CIMMYT headquarters had worked. Mike, along with Don Winkelmann, had for some time been focusing on the problems of small farmers and the challenge of adaptive agricultural research to meet their needs. When I asked Mike about attending our August meeting of FSR specialists he declined saying his schedule wouldn't allow it. But he assured me that Winkelmann, who had agreed to attend, could convey CIMMYT's approach. Checking out of the modest hotel where I stayed the first night, I checked into the Norfolk, my favorites when I could afford it. Quite by chance I bumped into Ato Desta, manager of the Ethiopian Shipping Lines. He said that Mengistu had imprisoned Ato Ashenafi. That was unwelcome news. I also met Torrent, one of our contacts in Mexico when the three of us visited there. Small world!

After three days in Nairobi I flew to Addis Ababa without ever having secured a visa. But this turned out not to be a problem because I received a temporary one at the airport. Continuing my good fortune an ILCA driver was waiting to drive me to their downtown headquarters. I introduced myself to Temple, talked about his Colorado connections, then got down to serious discussions about the Center's mission, which was focused on cattle's importance to rural African families. Partly nomadic and partly sedentary, studying the farming systems of livestock-dominant

farming requires a different approach from that of cropping. Even so, I concluded that ILCA had made strides in FSR.

The next day, I arranged a last minute meeting with AID/Addis, since my correspondence with the Mission had not gotten through. Even so Ken Sherper, the program director, made me welcome. He said they were out of the loop when it came to FSR, but offered to have someone drive me to Debre Zeit where researchers were working on a cattle-based methane gas project. That afternoon while walking along a wide sidewalk near Maskal Square, I heard a persistent honking behind me. I paid little attention, since I was six feet from the curb. Eventually, I turned around and saw a small car behind me. The driver got out of the car and ran towards me. It was Ato Yohannes Serzu. He said he could recognize me from behind by the way I walked! Yohannes had worked in the American Commissary on the checkout line and was on our Club's golf team. After awhile I asked him how I might contact Zewdie. He arranged a meeting at the Ghion that evening where we ate in the newly construction dining room decorated with an African motif. I tried to pay saying I was on per diem, but Zewdie persisted even though money was much dearer to him than to me.

Shortly after lunch the next day I took the short flight to Dar es Salaam. I checked into an upscale, businessman's hotel in the center of town. Temple had made reservations for me, so I expected to be checked right in, but the desk clerk said that the maids were still preparing my room. "Please take a seat in the lounge and we'll get to you soon." I found a comfortable easy chair and added some notes covering the last few days. Looking up after a while, I noted about twenty others seated around me, waiting as I was. Now, it was drawing on six o'clock and we were still waiting. I skipped dinner, not wanting to lose my chair. Hours slipped by. Now, it was eight o'clock, then nine, and then ten. By now, I noticed that the crowd had thinned out. Those who had come in after me were no longer there. *Finally*, it was midnight I was the only one waiting when the clerk came up to me and said my room was ready. I was dense in not knowing the *game* they were playing on me. The reason I had to wait so long was that I had not slipped a few shillings to the desk clerk. That is not the sort of thing I do, but would if I were to return to Dar again.

Thus, I got off to a bad start, and things didn't improve the next day. I got directions to the AID office, which was within walking distance. When I checked in with the receptionist, I

was told that no one there knew I was coming. What was even worse, the AID Director doubted that I had ever tried to gain approval before coming. That offended him to the point that he told his staff not cooperate with me! I think he was demonstrating that *no one* should come to his Mission without official approval. Never mind the validity of my coming here in the name of an AID/Wash-sponsored project. Despite his directive, Rose Marie, the Director' secretary, took pity on me by calling the Tanzanian Crops Research Unit and setting up an appointment for me there. I found that the Unit was following many FSR procedures. The meeting lasted 90 minutes, which was it for the day. I had asked for AID to arrange transportation to take me to the regional research station at Morogoro 125 miles inland, but the Director refused saying the trip was too dangerous. Even so, Jon Moris, a USU sociologist stationed there, heard I was in town and drove to Dar to meet me. We had a good discussion about how farm households would benefit from FSR. We talked for a couple of hours after which he drove back to Morogoro.

The next day, I finagled a ride from one of the AID guys who was going to the Crops Research group at the Univ of Tanzania located ten miles outside Dar. Although unannounced, a couple of the staff welcomed my visit, told me about their research, then suggested I visit the library to see what they had published. Finishing that, I walked through the University gate to a bus stop. About two dozen male and female Tanzanians were waiting. It was not difficult to find someone who spoke English to tell me which bus to take back to the city. My English translator had not gotten on the bus so that I was left on my own. From the sun, I could I tell I was going in the right direction. But with no tall buildings marking the downtown area, I didn't know if we had already passed that area. Not wanting to go too far out of the way, I got off. I first walked east to the ocean then decided to turn to left. As I continued walking, I found the buildings were closer together and the number of pedestrians and vehicles increased. So, I figured I was on the right track. I finally made it, after two hours of walking. I didn't mind the walk, for it gave me time to think. But I thought, here I had come all this distance for a couple of days of interviews for a study sanctioned by our government. The cost of my being here must have been considerable. And yet I had waited for a bus then walked for two hours to get back to my hotel. That evening, the Peace Corps Director for Tanzania, came by to tell me about his

group's participation in the drive to alleviate hunger around the world. Word must have gotten out about my presence in Dar.

By now, I had covered Kenya, Ethiopia, and Tanzania and it was time to return to Nairobi to catch my flight to Lagos. When I checked in at the airport I was surprised, although I shouldn't have been, that I could not fly from Dar to Nairobi because the countries were in conflict. I hadn't kept up on what was going on in the area. To get to Nairobi I had to fly to Malawi, overnight in Blantyre, then fly back *over* Tanzania to Nairobi. While this change of plans delayed my trip, all was not bad. This detour gave me a chance to see Blantyre for the first time. After checking into the hotel I went for a stroll through the small, downtown area that I thought reminiscent of a 19th century European village. The store fronts displaying their wares were small, the curbed streets were paved, and the sidewalks swept. Decorative trees lined the way. The people I passed, both black and white, nodded politely.

I soon exited the area and walked down a hill and up another. The houses on both sides were both small and large with mowed lawns and well-kept flower gardens. Eventually, I wandered over to the city's golf and country club. Holding my breath for fear of being challenged at the door, I entered a spacious reception area. Off to one side was a long oak bar, crowded with men in knickers and women in golfing skirts. A dart board was in the corner and a dining room off to one side. Seeing enough, I left the building and walking on the sidewalk bordering the course. The green, fairways and sand traps were all well kept. I thought how nice it would be to become part of this society. That evening I tried calling Becky, who was with the Peace Corps in Lesotho, but the call did not go through.

The next morning I took a taxi to the airport. For miles along the way were rows of hibiscus in full, red bloom. The plane departed for Nairobi at 7:15. Down below I could see Lake Nyala, which stretches along the eastern border of Malawi, reportedly the eighth largest lake in the world. I spent six hours cooling my heals in Nairobi having arrived mid-morning and not leaving till mid-afternoon. The wait was not unpleasant: I worked on my notes, prepared for upcoming meetings, and enjoyed watching the tourists arriving and departing. The distance to Lagos is about the same as from New York City to San Francisco. I arrived shortly after the

sun had set. As we circled for landing I could view Lagos below, a sprawling city of four million.

On the ground I breezed through customs, although the officer there wondered at all the papers and reports I was carrying. Going through passport control, I had to take out my wallet and count the amount of currency and travelers' checks I had. I did this off-handedly, since it seemed a boondoggle. And it was because nothing came of it. With my suitcase and briefcase in hand I passed through the door that led to the airport lobby where hundreds were lined up outside the barrier. I expected, and was not disappointed, to see a black-skinned fellow holding high a placard with my name written in large letters. I had come to expect this efficiency from the Centers. The driver grabbed my suitcase and headed for a shinny, new Mercedes. From there he slowly wound his way through a maze of narrow, muddy streets bordered by wooden commercial and residential buildings. Traffic was heavy with autos, scooters, bicycles weaving in and out, and people walking along the edges of narrow streets. Unattractive, yet interesting. Still in town, the driver turned into the entrance of a two-story, wooden building. The guard opened the gate to let us pass through. He told me that this was IITA's guest house where the cook would prepare a light meal for me before I turned in.

Early the next morning a driver arrived to take me to Ibadan, where IITA was located. Although the trip was only 80 miles on a well-constructed, divided highway, I was not looking forward to it. I remember reading about the short life of vehicles in Nigeria. At the time I figured that the reason was a combination of humidity that rusts the engine and frame, the lack of spare parts, and poor maintenance. Wrong! The answer was due to so many accidents. The report described the often undulating terrain where one-lane bridges often spanned the small rivers and streams. It went on to tell how the drivers of heavily loaded trucks would aggressively enter the bridge expecting on-coming drivers to give way. Unfortunately, too many did not. With all this in mind, I told the driver of the new Mercedes that I was not in a hurry. English is fairly common in Nigeria, so he understood me. But my comment had little effect. As soon as we left the city and got onto the divided four-lane highway, he kicked the speed up to over a 100 mph. Seeing the wreckage of vehicles left in place along the way was not reassuring. But we made it to Ibadan, Nigeria's third largest city.

Steering clear of the city-center, the driver drove a ways into the countryside and eventually to the Center. By now I had come to expect the many well-kept buildings and grounds. My five-day visit to IITA was similar to those at the other centers. I met Kang, who was in charge of FSR. Much of their effort centered on rain-fed crops. Since cassava is so important as a staple crop, IITA had been working with varieties resistant to cassava mosaic. Kang took me to see some of their on-farm trials. Along the way we stopped to see farmers clearing forest land by slash-and-burn. A lot of manpower is needed to get this done; yet, the soil's fertility diminishes within a few years. So, the process has to be repeated with the result that these farm families live at a subsistence level. He said the Center is searching for other modes of farming.

Upon our return, Kang suggested I meet Menz, the Center's chief economist. To my surprise Menz said he had heard about FSR, but didn't know much about it. One researcher showed us his trials for weed control. In this hot and humid environment weeds are the major problem. Others showed me their work with grain legumes, agricultural mechanization, grain storage, and devices for measuring sediment. These visits tended to be short, showing little relationship to FSR. The combination of shallow soils, weeds, and pests seemed to present such a challenge that FSR programs of the type I had seen elsewhere were of low priority. Consequently, my visits with these scientists were often short and off-topic.

However, Wilson, an agronomist, took a liking to me. He said he was an American with degrees from one of the mid-western universities. As quitting time arrived he showed me around the complex, which included some of the recreational facilities for the Center's staff: tennis courts, a large swimming pool, and a nine-hole golf course. I told him about my interest in golf. So, the next day I quit my interviews early and the two of us played the nine-hole course. Although the holes were not long, the layout was hilly and the fairways were narrow and lined with trees and underbrush. Another afternoon after completing my interviews, I decided to jog the three-mile loop around the station even though the temperature and humidity were in the nineties. About a third of the way, I suddenly got tired. My head felt hot and I was dripping with sweat, yet the cooling effect was not occurring. So, I stopped, rested, and walked

back to my room. I'm guessing that I nearly had a heat stroke, which had never happened before.

After returning to Lagos I took the short flight to Monrovia. The hotel reservations that AID had made for me were in a first-rate hotel. It's location was at the end of the main city street atop a hill that not only provided an interesting view of the city below but the Atlantic Ocean. Wanting to have local currency on hand, I signed a couple of travelers' checks telling the cashier that I wanted local currency. Instead, he handed me US dollars. Pushing back the money, I said I wanted this in *local* currency to which he replied, "This *is our local currency*!" Shocked at first, I soon recalled stories about Liberia being settle in 1821 as a homeland for freed US slaves.

I came here to visit WARDA, the Rice Association that was constituted in 1970 by eleven West African countries. Its mandate was to conduct research on new rice varieties, train researchers, promote greater rice production, formulate rice policy, and encourage intraregional cooperation. I learned a lot about rice during this short visit. I spent several hours in the microfiche library where I could view the results of many on-station and on-farm trials. I met with several rice breeders responsible for improving rice production under different growing conditions. Especially interesting, I thought, were long-stem rice varieties suitable for the ebb and flow of the salt-water tides. The second day I met with Spencer, whose name I recognized from his writings on the economics of small-scale farming. He had graduated from Michigan State Univ with a PhD in economics. He filled me in on the connection between their on-station and their on-farm trials. Then he drove me 50 miles into the countryside to visit one of their training centers and their "up-land" rice trials.

Over the weekend I worked on my notes, swam in the hotel pool, and went to Sunday church services located a mile from the hotel down the main street. I think I was the only white face in the entire congregation of 200. If so, it didn't matter because those around me welcomed me after the service, as did the Minister. That evening I was to experience another scary ride, this one to the airport. Darkness had settled in, it was raining, and the black surface of the winding road through coconut plantations sucked up the light from the car's headlights. Again I

told the driver I had plenty of time before my flight left. And as usual he paid no attention driving this 40 mile winding road at 80 mph.

My flight to Dakar was only 90 minutes putting me there at 2:00 a.m. Thanks to someone, I was booked into the Villa D'Ngor, a luxury beach-front hotel 15 miles outside the city that caters to Europeans. After sleeping in followed by jogging, I went to AID's downtown office. There I met Dennis Baker, who said they he hadn't heard about my visit, which was no surprise by now, so wasn't prepared. Nevertheless he graciously said he would help me as best he could. He introduced me to McNeal of the IDRC, not the first one from there that I had met on this African trip. After listening to him talk about his interest in FSR, I realized that we had been remiss for not including IDRC as an organization we should have visited. And it was practically in our own back yard!

Later, Dennis showed me the AID library where I spent a couple of hours reading reports written in English. I was able to make some sense of those written in French because of the similarity of many French nouns to those in English and the similarity of many French and Spanish verbs. Speaking and understanding verbal French was another thing. I was aware of Purdue University's focus on the Francophone countries because of a visit by one of Bruce's acquaintances. I had come here to find out more about the progress ISRA was making in FSR, especially as it concerns dry areas like the Sahel. Besides gaining information useful to our study, I wanted to see the Sahel firsthand. Even though being posted in one of the Sahelian countries would have had its challenges I had said that I would be willing to take a three-year assignment there just because of the challenge as well as the opportunity to learn French. Nothing came of it.

With Dennis's help I was able to line up a translator and hire a car and driver to visit ISRA's headquarters in Bambey and the French technical assistance office in Kaolack. Showing interest in our study Dennis asked if he might accompany me on the trip, which I found reassuring. The meeting in Bambey went smoothly because the young researcher in charge spoke English. He told us about their program, which had been going on for several years, and we informed him about what we had seen so far as part of our study. Expressing his interest he

gave me some of their annual reports, allowed me to copy several unpublished documents, and suggested we keep in touch. Our other stop was in Kaolack further to the southeast where we met Jaques Faye, Regional Director of Tcharean, a French technical assistance company in support of ISRA. There, I needed a translator.

On the way to and from these two locations, amounting to 300 miles, I got a good chance to see the countryside. The terrain was flat with scatterings of small trees, farm buildings were well-kept, traffic generally light, and the climate warm but not oppressive because of the low humidity. Overall, I found the trip pleasant. It had been a long day: we had departed Dakar at 5:00 a.m. and didn't return till 8:00 p.m. Dennis and I dined at a fine French restaurant. I persuaded him to mail my collection of reports and papers back to Logan. Then I hired a taxi to take me to the airport for my Air France flight to Rio scheduled to leave at 1:00 a.m.

The airport terminal in Rio was expansive. With plenty of time before my next flight I just took in things Brazilian. This was my first time in a country of which I had heard so many good things. One of these, but not the most important, was the availability of modestly priced gem stones. Ever since I had noticed a star sapphire ring on the finger of an airline stewardess many years ago I had wanted to buy one for Vicky. Here, the price seemed within my price range, so I bought one. Later, I learned that it was a "cultured" stone, not the real thing. Still, I was satisfied with my purchase.

It was just an hour's flight to Brasilia where I had an interview with Embrapa, Brazil's massive agricultural research corporation serving the entire country. In 2010 the corporation had 43 research stations throughout the country, 900 research projects, and 9,500 research managers. Established just six years ago in 1973 the military government credited Embrapa with lowering agricultural costs, increasing crop yields, and reducing the country's imports of agricultural products. After several long distance calls I was put in touch with Bob Armour, CGIAR's liaison with Embrapa. He had cleared the way for me to meet the president of Embrapa, Eliseu Alves, and several researchers interested in FSR, made hotel reservations, and

would send his driver for my meeting with Alves. That meeting went on for two hours! I was awed by the deference I received when I arrived at the headquarters. He greeted me in his large office on the top floor as a professional, yet in a friendly manner, directed me to a comfortable chair across from him, ordered coffee, then asked what he could do for me. I described our study, the reason for it, and my purpose of learning more about Embrapa. He said that the Corporation's focus was *not* on FSR, but on ways to feed the large and growing urban population by relying on modern agricultural methods so as to keep food prices down and the country peaceful. What could I say to that? Even so, he was curious, asking lots of questions about whom we had seen and what we had uncovered so far. He saw nothing *wrong* with research aimed at small farmers, only that was not the primary objective of Embrapa. When I realized I had taken up *two hours* of his time, I apologized saying that I had kept him far too long. He must have many other more important things to do than talk with me. "No," he said, "I have organized things so that I have time for interesting discussions such as ours." I was speechless.

I don't recall much about my other meetings; but I do remember having a 2.5 hour lunch with Bob Armour. He gave me my itinerary for the rest of my time in Brazil including the names of my Embrapa contacts and information about my plane and hotel reservations.

Afterwards, I walked around for a better look at Brasilia, the new city established as the Brazil's capital in 1960, intended for government authorities. The large buildings, set apart amidst large grassed areas, revealed this intent.

That afternoon I flew to Salvador a coastal city in the state of Bahia, and checked into the Orthan Palace Hotel. It too was overwhelming. My large twentieth-floor room overlooking the beach below was luxurious in its appointments. The next day being Sunday, I swam in the hotel pool, walked along the beach, and ran five miles. The run gave me a chance see the city. I kept thinking of the Girl from Ipanema, not realize that Ipanema was the name of a beach in Rio.

My last three stops to collect information in Brazil were Recife, Belem, and Manaos. All offered different aspects of Embrapa's operations. Recife, located on the furthest most tip of the country, had to do with training and education; Belem, located just off the equator on the Baía da Marajó, had to do with farming systems; and Manos 700 miles up the Amazon, dealt with forest

management, land clearing, and tropical plants. I remember little about my Recife visit. But my recollection of Belem is crystal clear. As Bothelho de Andrade, a soil scientist, showed me some of their on-station trials we stopped to get a drink of water. Then, as we continued on, he tossed his paper cup on the ground. We exchanged glances and he said, "That's the way we do things in Brazil, not like in the USA. Go ahead, do so too." So, I did. Later in the day, I spent time in the library reviewing some of their farming systems reports. Although in Portuguese, I could get enough of the drift that I could choose those reports I wanted sent back home. That evening Bothelho invited me to dinner with him and his wife. We ate at an open-air restaurant on the bay, candle-lit, and cooled by a gentle breeze. Here we were on the Equator sitting outdoors and enjoying it. I say "cooled." Well, maybe not; but the heat was not oppressive. I've been hotter on summer nights in Iowa.

My experience in Manaus was more dramatic because I spent more time there. This good-sized city is 700 miles up the Amazon. I definitely got the feeling of being in a primitive environment even though Manaus was a modern city of 800,000. Tropical rainforests abound, the Amazon is wide, deep water flowing smoothly, the temperature hovering around 90°. That and the high humidity combined with a strange calmness produced a mugginess that struck me as different, like the weather just before a tornado strikes. The next morning when showering I reached up above my head and received an electric shock that went down my arm, through my body, and "hit" the calves of my legs. I looked up and saw that the water was heated by an exposed electric coil that only came on when I turned on the hot water handle. Dangerous? Probably yes because I was *standing in water and my body was dripping wet*. Probably not serious since I had only *touched* the heater not *grabbed hold* of it.

A driver from the Center picked me up at the hotel and drove us about thirty miles to its headquarters in the jungle: flat terrain, tall virgin timber, heavy undergrowth of shrubs and grass, and occasional bare areas showing erosion probably caused by the heavy rains. Imar Cesar de Vicente Aranje, the new head of the Center welcomed me to their headquarters. Then we drove to the experiment station where he introduced me to the station's director, Alfonso Celosa Valois, deputy to Vicente who then served as my guide. We visited the inter-cropping experiments (i.e., two or more interspersed crops in the same area), tree crop experiments, and

the Center's buildings that had been built only recently. We had lunch in the company's simple, open-air dining area. It was there that I was introduced to their popular soft drink Guaraná made from a berry about the size of a coffee bean that grows in clusters and contains twice as much caffeine as does coffee. Consequently it's a pleasant energy booster. Brazilians drink Guaraná as our Southerners drink sweeten ice tea.

After lunch, Alfonso drove to an area being stripped of tall timber that was being cleared for experiments. The clearing process used two large Caterpillar tractors about 150 yards apart and dragging a heavy chain that mowed down all that's in front of it, including trees 100 feet high. Other tractors pushed the downed material into huge piles that were set on fire to smolder until they become a pile of ash.

Once I had seen what there was to see we headed back to the Manaus airport. I found that I had to fly back to Rio, even though a flight to Venezuela would have been *much* closer. I tried to point this out to the airline attendant, but to no avail. So, off to Rio I went arriving at 8:00 p.m., caught a flight to Miami three hours later, arrived there at 6:00 a.m., and back home by 4:00 p.m., June 8th. I had been gone an entire month. The good news Vicky gave me was that I had made tenure! It was going on six years and nine months since I had joined CSU. If it was true that one had to make tenure within the first seven years or be forced to move on, I had barely made it.

I took a couple of days to recuperate then began writing thank-you notes for the help I had received along the way, putting in order the volumes of notes I had taken, and planning for the workshop of FSR specialists scheduled to meet the first part of August. During the last week in June, Perry, Bill, and I sequestered ourselves for five days in a quiet motel in Estes Park. We had a lot to talk about starting with what we had learned during our trips. By the second day we began talking about the our final report. By now we had concluded that it should be written as a guide for those who would be implementing an FSR approach. We would call the document Farming Systems Research and Development: Guidelines for Developing Countries. The Development was my idea, given my emphasis in that area and my belief that the research results ought to contribute to developmental goals. Years later, Pete Hildebrand and his associates

changed the word Development to Extension because that is the way research findings are made widely available to farmers and their advisors. By then, I thought Pete's reference to Extension made more sense. We devoted the rest of our time in Estes Park in preparing a detailed outline for our final report, as well as questions that we would like have answered at the workshop.

One of the reasons I had chosen Bill as one of authors was from the many interesting discussions we had in the past. As for Perry, Peairs Wilson's statement that Perry would be loyal translated to his willingness to debate the issues. Besides, Perry tickled my funny bone. He had little meat on his medium-sized frame. was hawk-faced, paid little attention to his appearance including his rumpled straw, and his sly smile ready to break out at any minute. We were a congenial group.

The next seven weeks slipped by quickly and then the specialists were in town. Bob Hart was up from Costa Rica, Dick Harwood from the Philippines, Pete Hildebrand from Guatemala, Bert Krantz from India, Dave Norman from Kansas State Univ, Jerry McIntosh along with Suryatna Effendi from Indonesia, Don Winkelmann from Mexico, Hubert Zandstra from the Philippines, and Don Plucknett from Wash, D.C. Besides the specialists we invited the six members of my Advisory Committee and, of course, Ken McDermott. We also invited three observers: Bruce Anderson, Kutlu Somel the Deputy Director of the Economic and Social Research Institute in Turkey, and Wayne Wymore from the Univ of Arizona because, as a *systems* specialist, he had persuaded *someone* that his input was relevant. I thought otherwise about Wymore's relevance but was overridden by someone.

As weighty as was this whole group, we urged the Advisory Committee and Observers to please refrain from entering into the discussion. What we were after was for these FSR specialists to have an easy and open discussion. Many of these specialists had heard about the work of the others. But this was the *first time* they had been brought together and be able to listen, challenge, or support each others ideas. These others complied with our wish, with one exception. The uninvited indefatigable Jerry Eckert, Ag Economist from CSU showed up and took a seat next to Dave Norman and readily participated in the discussions. Jerry had a long and meaningful career in Pakistan, Lesotho, and South Africa. So, his thoughts were worth

listening to, though not particularly relevant for this Workshop. I didn't think it worthwhile to discourage his presence nor did anyone object. Besides Jerry was a good friend with whom I had a lot in common. I did not invite three others who wanted to attend: Charles Weiss of the World Bank, which I now think was a mistake. Nor did I invite Wayne Clyma or Max Lowdermilk. All were offended.

On Wednesday, the day of the specialists' arrival, we threw a reception at the Univ Motor Inn, a popular place on College Ave just across from the Univ and a welcoming reception that evening. Dave Redgrave, an irrigation engineering professor at CSU who was to become a close associate of mine, tended bar. University and AID regulations did not allow project funds to be used in this way. But Bill, who had served as interim Department Head in Soil and Plant Sciences knew how to subvert this restriction. Our Advisory Committee requested that Perry, Bill, and I meet with them early the next morning. After that the Workshop began.

I open proceedings by welcoming the FSR specialists and the observers, gave the agenda, and told what we hoped would be accomplished. Then, I turned the podium over to Plucknett, who had agreed to moderate our meetings. All went well this first day, although heated discussions occasionally broke out. Winkelmann was an eloquent speaker who did not hold back on his ideas about applied research. This rankled the soft spoken Dave Norman who had spent *years* working with small farmers in northern Nigeria. Far from being disruptive these outbursts lent spice to the discussions. Those of us who did not engage in these discussions were amazed because we were unable to discern the discipline of the speakers. For example, Winkelmann and Norman were economists, but they spoke knowledgeable about the intricacies of agricultural research trials; Hildebrand and Zandstra were livestock specialists who knew the details of cropping systems. Rather than speaking about their first-line specialities, they talked about the many facets of small-scale farming. This was a truly *interdisciplinary* group, quite different from a *multi-disciplinary* gathering in which each participant expounds on his area of expertise.

During the afternoon a small group of us sat in a campus classroom with video taping facilities to listen to each of the specialists give a 20 minute presentation on what he was doing in

FSR. Don Winkelmann led off with "Aiming Agricultural Research at the Needs of Farmers." He began with a pause, looked at his audience, then opened with a loud, "Right!" which sounded so "British." Later, in his speech he warned against making "perfect the enemy of the good." Along the way he used the word, *pejorative*, a new word for me. Then, down the line: Dick Harwood spoke on Farming Systems Development in a Resource-limiting Environment, Dave Norman on A General Overview of FSR, Bob Hart on An Ecological Framework for Agricultural Research, Hubert Zandstra on A Cropping Systems Research Methodology, Pete Hildebrand on Motivating Small Farmers to Accept Change, Jerry McIntosh on the Indonesian Cropping Systems Program, and Bert Krantz on FSR at ICRISAT. That evening CID invited the specialists and others to dinner at the Hermitage, an excellent restaurant with a mountain lodge decor south of town. Jerry Burke, Donal Johnson, and Bruce Anderson thanked the specialists and those who made the Workshop possible.

Discussions remained lively on Friday as we got further into the details of our study. Most of the discussion revolved around the different situations and experiences that lead to different research approaches. At this point none of them referred to their work as Farming Systems Research, nor did they think they were part of a movement. That evening the specialists met on their own to decide what thy would recommend for us still to do.

Saturday morning Plucknett stepped aside to let Hubert Zandstra report on the specialists' conclusions and recommendations. On behalf of Perry and Bill, I thanked them all for attending and adjourned the Workshop. During lunch Ken told Perry, Bill, and me that he was well satisfied with the Workshop and to keep up the good work. With that, the three of us gave a huge sigh of relief. But that was not the end of it. The American Society of Agronomy had scheduled its annual meeting at CSU to begin the next day. During the coming week of ASA meetings, Perry, Bill, and I met with Krantz, Plucknett, Zandstra, and Harwood. The latter gave us three hours of his time! We had scheduled our Workshop to precede these ASA meetings feeling that the appeal for our specialists would be strengthened by this juxtaposition.

But our feeling of euphoria did not last. Burke told me he was unhappy with us because we had seldom turned to the Committee for advice. This was probably true, but the three of us

had received good and relevant input from many of the FSR specialists, as well as from Ken who spoke for AID's interests. Besides, I felt that the Committee members were more interested in gaining something out of our project than contributing to it.

I got my next comeuppance two weeks later during my annual review with Bruce. My salary increase was nominal in contrast to what I thought I might get because of my success in Kenya and my progress with the FSR project. When I asked the reason, Bruce said that my salary was already too high, I hadn't fit into the Executive Office, the Peruvian project whatever that meant, and Burke's dissatisfaction with me. Since I now reported to Jack Keller, the new Department Head of Ag and Irrigation Engineering, who was on the Advisory Committee, I asked what he thought about my reliance on the Committee. He said he thought I was "doing things just right." Howard Peterson, my confident during my trips to Kenya, told me to be careful, given the jealousies between CSU and USU that had evolved over the years. That cemented my resolve to leave Logan. I even drafted a letter of resignation from my CID position and the FSR project. The latter didn't happen, but I did pursue the former.

In anticipation of CID's dissatisfaction with me, I had contacted several about moving the FSR project to CSU. Both Daryl Simons and Jud Harper, VP of Research, had agreed. Next, I checked to see if Fred Smith would accept me back into the ME Department. He said yes. I might have guessed his response since I was bringing a project worth close to a million dollars. Even though the Department could not access much of this money because most of it had already been committed, it did add to the total managed by his ME staff. It was a numbers game. Finally, I asked Jim Meiman if he would be my primary contact on the Advisory Board. He too agreed. Having Meiman as my liaison would put a buffer between Burke and me, which I sorely needed. Months later, when CID was looking for Bruce's replacement, Burke wondered why I hadn't applied for Bruce's position. Is that what had been floating around the Advisory Board?

As disruptive as this whole business was, once I had gotten agreement about moving to CSU, my mind was free to focus on our project.³ The first order of business was to expand our project staff to cover additional areas of expertise. Accordingly we advertised throughout the

³ By mid-January, 1980 we moved back to Ft Collins.

CID universities about the opening of additional positions. We ended up bringing in, Robert Dils, former Dean of Forestry at CSU, for his expertise in watershed management, Helen Henderson, of the Univ of Arizona, for her knowledge of anthropology, Gary Hansen, of the Univ of Hawaii, for his knowledge of organizational structure, Jim Meiman, Dean of CSU's Graduate School, for his expertise in education and training, Tom Trail, of Washington State Univ, for his expertise in Extension, Harold Stonaker, retired Dean of Animal Sciences at CSU for his knowledge of livestock; and Dick Tinsley for his knowledge of rice cropping. Perry, Bill, and I organized our efforts so that Trail and Henderson reported to Perry, Stonaker and Tinsley reported to Bill, and Dils, Meiman, and Hansen reported to me.

This arrangement meant that each of us had responsibility for only two additional positions. Perry also looked after Jen-hu Chang, agro-climatologist, and George Beal, rural sociologist, both at the Univ of Hawaii, who were used only occasionally. Derrick Thom, a geographer from USU with knowledge of French, reported to me during the initial stages of our project. We arranged for him to go to Senegal to follow up on my meetings there and to translate portions of the documents in French that I had brought back from there. We used Dils in ways to be reported below. Our graduate research assistants were Ann Perry-Barnes and John Rocklein, who reported to Perry, Mike Read reported to Bill, and Tom Sheng reported to me. Don Zimmerman became our senior editor. As our Guidelines approached completion, we brought in additional specialists for the bibliography and index. This list of people reflects the magnitude of our operation.

Perry, Bill, and I got along fine as co-authors. Only a few times did we fail to reach a consensus, and when that happened I exercised my authority to override their positions. Only when we were heavily into the writing did tension rise to the surface. For example, Bill wanted us to include the On-Farm Water Management writings of Clyma and Lowdermilk. But their work never mentioned the concepts of FSR, nor did they know anything about it. Even so, I reviewed the examples of what Bill wanted me to include, and thought them inappropriate. The underlying difference between their work and FSR was they thought farmers were *ignorant* and needed to be told what to do, those in FSR *respected* farmers, wanted to learn from them before making suggestions. As for Perry, I appreciated *so much* his willingness to come to Fort Collins

for long periods of time to work with Bill and me. On only one occasion did he disappoint me. This was towards the end when I found that he was *rewriting some of the quotations to make them read better*. I couldn't believe what he was doing. It's one thing to paraphrase, but quite another to modify *within quotation marks*. I thought with his long list of published material he would know better. He gave me his charming smile and went back to work, while I rewrote his *edited quotes* to bring them back to their original form. But these were only a couple of instances. On the whole, we got along just fine.

We were lucky to have Don Zimmerman, a CSU professor of tech journalism, because of his technical background, imagination, and dedication to our project. As for his background, Don had an undergraduate degree in biology, a master's in communication and a PhD in tech journalism. Because of Don's biology education and experience, he was able to point out occasional technical shortcomings. His ideas about getting the Guidelines published resulted in their reaching *far more readers* than otherwise would have occurred. And his dedication meant that I could call on him at any time and he would show up. When Bill and I met with Don during our search for an editor, Don asked, "Who's the audience?"—a key question for a publication such as ours. We answered by saying it was primarily for agricultural researcher working in the developing countries. Next, he suggested we write in the *active* not *passive* tense, which we accepted and tried to followed as best we could. We were to be surprised how widespread the use of the passive tense was among our contributors.

With our team in place, Perry, Bill, and I set about integrating the newly acquired members into our project. Just before Christmas Bill and I flew to San Francisco where we meet Tom Trail of Washington State Univ; and Perry and Gary Hansen who flew in from Hawaii for a planning session. We thought that San Francisco would be both pleasant and convenient. The meeting allowed Perry, Bill, and me a chance to get to know Tom and Gary, reach an agreement on their assignments, and begin categorizing our data. Earlier, I had proposed a search mechanism whereby we could sort and subsequently call up data according to author, title, date, subject area, and country. I was convinced that some computer program "out there" would allow us to do this. The motivation was straightforward. We had collected so much information and we had so many on our team studying and writing that some way of categorizing

and bringing up the data was needed. I set Tom Sheng working on this. To our surprise, he could not find such a "search engine." Recall this was the fall of 1979. *Finally*, Tom located what we were looking for, a program called FAMULUS developed by a division of the U.S. Forest Service in California. How antiquated that all seems today.

Three months later, Bill and I flew to Honolulu to meet with Perry in an effort to reciprocate, since Perry had so often come to CSU. This occasion gave us a chance to meet Gary again, George Beal, and Jen-hu Chang for the first time, as well as to pay our respects to Peairs Wilson and Dean Furtick. We three authors went over our outline, which seemed in pretty good shape, then reviewed what Perry, Trail, Henderson, and Dils had written. On the third day Perry excitedly said that Dean Furtick had told him that Don Plucknett was unhappy with our work. He suggested that we meet with Furtick. Recoiling at the message, I refused, at least until I had contacted Ken for his advice. After returning to Fort Collins, Ken eventually phoned me to say that we should continue the way we were going and let him handle Plucknett. He added that each one involved with FSR has his own ideas about what should be done. So that was that.

Vicky had accompanied me on this trip; so, after a full week's work, she and I were ready to vacation. Friday evening, Perry and his wife, Liesel, threw a party for us. The next day they drove us around the island, which was a new experience for Vicky and me. Our brief landing in Hawaii on our way home Ethiopia had been given us just a glimpse of Honolulu. Somehow, Roger Ernst's name came up during our discussions at Honolulu's East-West Center so we contacted him, which resulted in Roger and his wife having Vicky and me over for dinner. We enjoyed ourselves, but the situation seemed strange. Roger had been the big-time AID Director in Ethiopia, had at times filled in for the Ambassador, and was generally held in awe. Yet, here we were much more on equal terms professionally. After that, Vicky and I spent four days on Maui, playing golf, swimming, touring the island, and just relaxing.

After this meeting in Hawaii, I made three more short trips. The first of these was to CIMMYT headquarters. Don Winkelmann had invited me to participate in a three-day workshop on the Center's approach to economic analysis as spelled out in *From agronomic data to farmer recommendations: an economic training manual*, by R. K. Perrin, Winkelmann,

Moscardi, and Anderson (CIMMYT, 1976). Don gave me a chance to explain what we had uncovered on this subject and how we planned to incorporated economic concepts into our Guidelines. As I was leaving to return home, Don said if I needed help regarding CIMMYT's economic approach just let him know. The second was a trip I arranged for Bib Dils, Tom Trout, and me to visit Honduras and Guatemala. These two were responsible for training and extension, respectively. In Honduras we paid courtesy visits to AID and the Ministry of Natural Resources, then went to an FSR site where we met Frank Peairs and Mario Contraras again. Before we left, we met Bob Waugh, a Rockefeller guy with years of experience in Colombia and FSR field activities in Central America. After several days we flew to Guatemala City so that Dils and Trout could meet Hildebrand and see the ICTA program there. My third was a two-day trip to Kansas State University to meet David Norman about being one of our paid advisors. Our other two paid advisors were Hildebrand and Zandstra. Besides their general advise and responses to our specific questions we asked them to come to Fort Collins to review our preliminary draft of the Guidelines. Bob Dils, with his considerable experience as a dean, chaired this review. The results of the review assured us that we were on the right track. But still had a long ways to go.

With that out of the way, Perry, Bill, and I turned to the next phase of our project. This was to be a field of the "first draft" of the Guidelines. We would invite pairs of researchers (a national and the advisor) to come to the USA where we could present our Guidelines for discussion then travel to Honduras and Guatemala, where effective FSR projects were well underway, to observe what was going on there. The idea was for them to compare what we had written with their observations of these two programs. I had suggested this possibility to Ken as a way to verify and improve what we had written. Ken had forgotten that a "field verification" had been written into the RFP. He soon agreed, but needed to get authorization and find additional funds. Once all was in order we chose representatives of ongoing FSR projects in Bolivia, Egypt, Lesotho, Tanzania, and Yemen, then sent them our latest version for their review before coming to the States. Our target locations for their visit was New Mexico State Univ, Guatemala, and Honduras. My choice of NMSU was to assuage Gerry Burke so he would get off my back. My choice of Honduras was to take advantage of Mario Contreras' keen insight into FSR. And my choice of Guatemala was to expose the reviewers to Pete Hildebrand's

imaginative ideas. Figuring a week at each location would be enough. Given Bob Dils' experience as Dean of Forestry I asked him to chair the discussions all three weeks. And I asked Ken to come along as an observer.

We began our tour once the five pairs had arrived. Our first stop was in Las Cruces where Gerry Burke was our host. Even the President of the New Mexico State Univ attended our first session there. Our team went through the Guidelines chapter by chapter. We would make a summary presentation followed by comments and questions. On the first full day, the advisor to the Tanzanian FSR project, a bean specialist, said he was not impressed with our findings. In fact he thought FSR offered little that was new. His reaction surprised us because apparently a lot of researchers are not yet on-board. That's why Ken warned us at the outset not to let the typical research station guy get to us. This process of reviewing the Guidelines chapter by chapter went on for five days. However we did take an afternoon break mid-way during the third day to visit local sites arranged by Gerry Burke. My purpose of holding this review at New Mexico State Univ was to give Burke and his staff at least some part in our project. To my chagrin the sites we visited included the largest pecan operation in the States, a large-scale cattle ranching operation, and a high-tech agrochemical firm, none of which had anything remotely of interest for our visitors, whose concern was small, limited-resource farmers. The next day one of the NMSU staff showed some slides about small-scale farming in north-central New Mexico, which were relevant. This area was the subject of the book, The Milagro Beanfield War, which helped a little. While the field trip was a bomb, to my way of thinking, at least I felt justified in not responding to Burke's demands that we incorporate some of NMSU faculty. He just didn't understand our project, nor did he understand Third-World conditions.

I had asked Tom Sheng to come on this trip to backstop me as needed and it was a good thing I did. In trying get ready for the trip, including my opening remarks along the way, I had practically worn myself out, so I wasn't organized. When I left Fort Collins, I had my notes and backup materials, but had left my suitcase in the car I had used to drive to the Denver Airport. Somehow, Tom got wind of this, traced down my parked car, and brought my suitcase to our initial meeting in Las Cruces. His attention to routine matters allowed me to focus on the main purpose of our trip.

Our next stop was Guatemala where we played tourist by visiting an Indian village with its picturesque church and market at Chichicastenango and the beautiful Lake Atitlán. Then on to Quetzaltenango. Our group listened to presentations by the ICTA group led by Ramon Ortiz and Bob Waugh. This visit gave our reviewers the opportunity to listen to this extremely effective FSR program. The next day we visited the on-farm trials on fields with extreme slopes and rocks that Perry, Bill, and I had seen before. Earlier, Pete had joked that it looked like the farmers were growing *stones* rather than maize or beans. That evening Jerry McIntosh, who had joined our group, spoke about FSR in Indonesia.

The following week, we flew to Tegucigalpa so we could visit the Pan-American Agricultural Center at Zamorano where we would stay for the next three days. The campus, set in a tree-studded, tropical plain, is a combination of classrooms, dormitories, shops, and land devoted to crops and cattle. Mario was on the faculty and participated in our discussions as did Bob Waugh. By now Dave Norman and Jerry McIntosh had joined our group. So, now we had two of the nine FSR specialists who had participated in our August Workshop with us. Our program was roughly the same as in Guatemala, just the same program in a different setting. The Center combines traditional academic courses with practical experience in a wide range of disciplines. For instance, those specializing in agronomy were expected to grow their own crops, which included land preparation, seeding, weeding, and harvesting. Likewise students majoring in animal science were expect to tend livestock herds, do the slaughtering, and process both meat and dairy products. The division of time between classroom and practical training was about equal.

On our bus ride back to Tegucigalpa I overheard McIntosh and Norman talking about AID's wisdom of choosing CID for the FSR study, when none of us had been involved with the approach. They concluded that AID's choice of CID was probably a good thing because we would be more objective whereas others might be biased by their own experience, which was good to hear. After preparing reports on their reactions to what they had seen and heard, our reviewers went their separate ways, while our FSR team checked into the Maya Hotel.

The following day our FSR team met all morning to talk about what we had learned and to plan what we would soon be writing. That out of the way, a few of us were relaxing in the Hotel's coffee shop. Sitting across from Helen Henderson, I casually mentioned that any surplus funds assigned to her under our contract with the Univ of Arizona should be used in support of FSR not for Women in Development (WID) issues. I reminded her that we had agreed at the outset, that she was free to use these funds as she pleased as long as they related to FSR *not* on WID issues; that if I were to learn that she planned such a thing, I would cut off the funds. With that she went ballistic and stomped off.

Helen had given me problems from the outset. While competent in her field of anthropology, her focus was constrained by this single discipline. Her field experience in West Africa, which required a knowledge of French, was meaningful. But I was never able to get through to her that we wanted her to interact with other disciplines—to give insight to our team in a way that would help us make use of anthropological concepts relating to small-farmers. She could write a scholarly paper suitable for peer review, but she had not been able to incorporate anthropological concepts into our study. In the end, we resorted to George Beal to cover the gaps Helen couldn't fill. Helen just couldn't respond to the needs of our project. My fault not perceiving this beforehand.

The other problem I had with Helen occurred while we were planning this current trip. One of her colleagues at the Univ of Arizona had told her that our planned trip to Quetzaltenango was dangerous because of an active insurgency there. I had heard about this before, but found no evidence of it during my previous trips to Guatemala. She was on the point of refusing to make the trip. So, I called Ken, who checked with our State Department, which said we were cleared to go. This made me wonder why an *anthropologist* would be bothered over such things.

With Tom Sheng's help we sent boxes of our documents back home. With that out of the way, I flew off to Cozumel to rendevous with Vicky who had already arrived there. Our accommodations were nice enough. We swam and snorkeled close to our lodgings where eels stuck out their heads as we swam by and the waves kept pushing us closer to them than we liked

and where we came across two long barracuda three feet away with an eye focused on us. Vicky said, "Let's get out of here," which we did. Later, we learned that barracuda seldom attack, unless one is wearing a shiny object, such as ear rings or a neckless. We also sailed down the coast in a small sailboat made out to look like a pirate ship. I along with two sailors dove into the clear water ten feet below the deck. I watched while they snorkeled below the surface without gear holding their breath for far longer than I could ever hope. We rested, ate well, and toured parts of the island. It was here that I learned how to pick up cone shells without getting stung by their proboscis. We were told that the sting can be painful, even deadly. All-in-all, we had a lovely time that I badly needed at this point.

After, a week we returned home and I was ready to get back to work. A day after I returned I met with Don Winkelmann, George Beal, and Don Zimmerman. I'm not sure why Winkelmann was in town but I learned later that Beal had a cabin up the Poudre. Both said they were supportive of our progress so far and would back us as needed. Assurance from two noted scientists such as that helped me overcome the down days that periodically came my way. After reading Perrin's economics training manual and Zandstra's A Methodology for On-Farm Cropping Systems Research (IRRI, 1981), I wondered what more our Guidelines could say. But Winkelmann knew these two publications well, so he must have concluded there was still more of value we could add.

Perry, Bill, and I spent the rest of the month focused on the third draft.⁴ We reviewed the reactions and suggestions of those who had made the trip to Central America. We re-read the Perrin and Zandstra publications and those by Beal, McIntosh, Waugh, and others. We had frequent telephone conversations with Gary Hansen, Helen Henderson, Tom Trail, to name a few while keeping Ken updated on our progress.

By autumn 1980, over eighteen months into the project, we began writing in earnest. Following the outline, we divided the eleven chapters among ourselves; each chapter having its

⁴ The first draft was little more than a topic outline while the second draft was the one we produced for our Central American tour.

own appendix. The specialists reporting to us contributed significantly. Dils wrote on training, Hansen on decision making, Meiman on organization, Henderson on sociology, Stonaker on livestock, Tinsley on research trials, and Trail on Extension. Perry, Bill, and I did the technical review of the two researchers reporting to each of us. And we three reviewed each other's work, which when finished we turned it over to Don Zimmerman. Don would occasionally would offer technical suggestions based on his knowledge of biology. Finally, as the senior author, I met with Don on everything going into the Guidelines.

Besides his work on training and chairing the sessions with our pairs of visitors, Dils persuaded me to go with him to Jamaica to view the work of Ted Sheng (Tom's father) in watershed management for the Food and Agricultural Organization. While not directly related to FSR, Dils thought this work important. So, I went along with the idea. This was at the time when the reggae songs of Jamaica's Bob Marley and Peter Tosh were all the rage.

The first great rush to complete this third draft occurred in November and December. Our target was to send this third draft to 30 reviewers before Christmas. These included Ken, the nine FSR specialists we had invited to our August Workshop, and those participating in our Central American trip. Besides these Perry suggested we send a copy to Prof Scarlett Epstein, an anthropologist specialized in rural development at Sussex Univ. This draft was more complete and refined than the one we had taken on our field trip. By now Perry and his graduate research assistant, Ann Perry-Barnes, had arrived in Ft Collins for an extended stay. Perry's presence allowed him, Bill, and me to interact closely. Soon Liesel, Perry's wife joined him in Ft Collins. However, Perry, now 68, was beginning to show his age. For example, after lunch he would go to the CSU Faculty Lounge for his regular nap. Besides this, he needed his eight hours of sleep each night. Bill at 63 hadn't begun to slow down. But he had other responsibilities and interests: namely, his research on sugar beets, occasionally filling in as Department Head, attendance at on-campus meetings of Sigma Xi, and Kiwanis. At 54, I felt strong and healthy; moreover, I was able to block out distractions when under the gun. Vicky would have liked it otherwise, but was understanding and supportive when I needed it the most. She had been that way through graduate schools and since then.

Why did we work so hard to finish the Guidelines? We were okay on the budget, but most certainly would miss AID's deadline for finishing the report. I had another motive for wanting to finish the project quickly. Simultaneously with our project, CSU was bidding on an FSR project in Tanzania. The Tanzanians already had paid two visits to our campus where Lowell Watts, Colorado Director of Extension, had put forth my name as team leader. I wanted very much to put into practice what I had learned. But the date at which I needed to be available had come and gone so Lowell told me he could wait no long. But it was a moot point since CSU didn't win the bid.

By mid-October, drafts of chapters began rolling in. We three authors, Zimmerman, Ann Perry-Barnes, and Tom and his newly-wed wife, Patti, began working in the evenings and on the weekends. Vicky would come to CSU to help type, intercept phone calls asking for me, and generally manage things on my behalf. Sometimes, as midnight approached, she said she couldn't work any longer. After all, her job at the First Presbyterian church kept her busy till 5:00. Although at times we broke for dinner at Caninos, an excellent Italian restaurant only a few blocks away. Lori, my secretary for the past year did not buy in to this frenetic pace. So, I resorted to part-time typists. At times I would be at the office till 2:00 a.m., return home for a "nap," and be back four hours later. More commonly, I would be in the office by 6:00 a.m. and work till midnight. I got to know well the janitors on night shift. It was "janitors and jazz at 1:00 a.m."

What helped me keep this pace was the 1978 film, *All That Jazz*. The film starts out with Roy Scheider turning off the alarm, putting on a cassette that plays a high tempo, classical piece with lots of strings, flushing his blood-shot eyes with eye wash, popping two Dexedrine pills, showering with a cigarette in his mouth, then raising his two hands to eye level, smiling, and saying "It's show time, folks." Mimicking the last part: the shower, excitement, and "it's show time" was such a stimulant that, following my own five-minute shower, I was wide awake and ready for work. At 55 I was in good shape, I didn't smoke, nor did I need "no-doze" pills or eye drops.

This heavy schedule went on till the first week in December. At that point, we had the third draft written, proofed, copied, and ready to be shipped to our reviewers. On a Saturday morning, I mailed the copies which went around the world. That done, I went home and "crashed." I had virtually nothing to do with the project for more than a week. Soon, responses began drifting in. One of these was from Gerry Burke who said he liked it. Imagine, with all the grief he had dealt me. Perhaps selecting NMSU as part of our Central American trip had paid off.

By mid-January we figured that we had nearly all of the responses to our third draft³ that we were going to get. So now we were going into publication. No more drafts. This time we had to get it right. Besides, this was not just another report that ends up on bookshelves having been little read. Ours was to be published in book form. With its worldwide distribution, we expected the Guidelines to be read by many. Don Zimmerman, who was *wise* about such things had initiated the process and guided my dealings with the publisher, Lynne Rienner of Westview Press in Boulder. Given the size of the book, Ken's desire for 3,000 copies, and our project covering preparation costs, Lynn's interest did not surprise me. As we progressed in our thinking about the book's format, we thought of embellishing it with photos of farming, farmers, and researchers from around the world. We went back to our contacts asking them to send us photos with captions. Unfortunately, in our rush to meet the deadline, I misplaced the captions. So, while the photos nicely illustrated what FSR was all about, the reader would to be left to wonder about who, what, and where. This one was on me. Don also persuaded a CSU undergraduate art major to provide us with sketches using our photos as a guide.

By mid-February we were writing in earnest: Perry was working on the conceptual framework (part of Chap. 3), Bill was working on the Introduction (Chap. 2), and I was working on the Executive Summary (Chap. I). From then until mid-July we and our co-authors plowed our way through all eleven chapters with their appendixes. From my SRI days, I learned to keep the body of a report focused on the main ideas and to provide supporting detail in the appendixes.

³ The first draft was little more than a topic outline and the second was in preparation for our Central American tour.

In our case, the main ideas flowed from the conceptual framework; in the appendices we buttressed our arguments with examples illustrative of different situations. As it turned out the size of these appendices equaled the body of the report. To complement the eleven chapters, we needed a Table of Contents, our Acknowledgments, a Preface, and sections on Acronyms, a Glossary, References, and the Index. For one not used to it providing so many references and preparing the Index can be a daunting experience. So, we hired specialists during the last month to do these tasks. Fortunately, AID had generously funded our project; so, we had the money to employ two specialists for these tasks.

In mid-April while we were deeply involved in writing, John Fisher, now CID's Executive Director, conned me into attending a Women in Development dinner at CSU. I should have known better. The next day I got a call from John, Jim Meiman, and Kate Cloud. She, with John's collaboration, complained that our drafts had excluded women! I argued that we had talked about the *farm family*, and that women are part of that family. They fetch water, gather firewood, tend the livestock, prepare food, tend to the children; some are even *heads of* households when their husbands leave for cash-paying jobs. Those who work in Third-World agriculture *know* this. Our FSR specialists certainly do. Why do I need to talk about *women*? In all our travels gathering FSR data, no one spoke of Woman specifically. For my part, I felt I had no bias against women. In our family my great grandmother Snyder, my grandmother Shaner, and my mother were all strong women. As further evidence of my respect for women, I chose Pixy Ross to help me in Lima. But that was not good enough for Kate, who was an adjunct professor at Harvard gaining recognition for leading this "Yuppie" movement. I had another problem with this Women's movement: it reflected issues and interests of the USA, not those of developing countries. So, I resisted. I didn't want to have to refer to the head of household as he, she, or he and she. But, I finally caved in. After all, John now represented CID, and Meiman was my superior at CSU. We ended up pluralizing everything. Instead of the farmer and his/her family, we wrote the *farmers* and *their* families. Still awkward to my way of thinking, but skirting the problem. And we included two short sentences in the body of the text and a two-page appendix written by one of Kate's acolytes. In reviewing the appendix I could scarcely bring myself to include it.

As we were nearly finish with only a few chapters to finalize, Gerry Johnson of our ME Dept suggested we might want to use word processing! This was during the early stages of its introduction at CSU. Without thinking twice, I said, "No, we're too close to finishing up. Besides, we would have to train our typing staff. There just wasn't enough time." But wouldn't it have been nice had he come to us six months earlier?

At times Bill expressed his frustration with how our writing was unfolding. Once he said we were being too academic, a suggestion Ken had also made during the August Workshop. I tried to respond, but apparently not to Bill's satisfaction. I also felt he was slight miffed that I was lead author who had known scarcely *anything* about agricultural research when our project began. Later, when listing our names I placed Bill's name after Perry's because Perry's efforts exceeded those of Bill's. (If I were modest, I might have placed my name last. But after all I was the project leader, with the responsibility that goes with it.) However, Bill had no objection to having Don Zimmerman's name on the title page in recognition of his outstanding editorial assistance. Our reviewers urged us to use less-sophisticated words because some of our readers would not have gone to some college or university. All of us did the best we could, but then, a section written by Jim Meiman talked of *paradigm*! Not an "every-day word" as far as I was concerned. But, what could I do?

Finally, on July 31st we sent our final draft to Westview Press in Boulder. All that remained for me to do was to proof the galleys. With that done and the 3,000 copies sent off to Ken, we were finished. The appearance of our 400-page paperback exceeded our expectations. We had missed the April 16th deadline, as well as the one-month extension, and another till June 23, but only by a week. Now, we just waited for the reaction from those who read our book. Some reviewers were favorable, some were critical. One reviewer even called our work *seminal!* We heard that the Guidelines were used as a text at major universities, such as Univ of California at Davis, Michigan State, and Cornell. Ken had asked if I would be available to lecture and consult on our book should I be called upon to do so. Being flattered to have him ask, I said, "Of course." But that never happened. Why should it, when the specialists whose ground-breaking work we had relied on were available?

Earlier, in late June, Vicky and I attended Fisaha's wedding. We got to know him at St Luke's Episcopal church, where we both attended. Few dark-skinned people attended the early morning service that we did. And, his features suggested right away that he could be Ethiopian. Fisaha, who was a graduate student at CSU, chose the Faculty Club for the reception. Resting after having danced for awhile, Vicky and I stood to the side and watched the dancers, some of whom looked Ethiopian. Vicky whispered to me, "Look. That looks like he could be Mohamad Ali's brother." (Mohamad had been Vicky's caddy in Addis, one who hadn't tried to hustle us when we first got there. Occasionally he talked about wanting to go to the States and join his brother there.) Then Vicky said, "I'm going to ask him if he has a brother whose name is Mohamad Ali." Before Vicky could ask, he shouted, "Mrs. Shaner!" It was Mohamad himself. How rare something like this happens? We talked and eventually invited him and his family for dinner. He told us that he came to Colorado thinking that he could find us because of our golfing prowess. Imagine that. Of course he was bound to fail. But he did get a job in the locker room at the Cherry Hills Country Club in Denver.

What was going on with the family during all this? Tim graduated from Ft Lewis in Durango, Vicky was first secretary at the First Presbyterian church, Pop Lynn dies, Becky meets David Palasits and remains in Lesotho, and Paul was in school at Poudre. I paid as much attention to the family as I could, which wasn't much.

Epilog

Time passes and I return from a lengthy assignment overseas to find Bill Schmehl slurring his words. I knew he seldom drank, so I kidded him about having imbibed too much. The sad truth was that at 78 he was in the early stages of Lou Gehrig's disease. His disease progressed slowly leaving him time to receive therapy, a voice box that allowed him to get the sounds out, and at the end a tracheotomy to allow him to breath. I visited him a few days before he succumbed. Perry died unexpectedly after having one of his long afternoon walks through the pineapple fields. Perry was 85 years old. Now, I'm the only one left. Don blossomed into a highly regarded teacher at CSU and onetime department head. As for the nine of the FSR specialists: Bob Hart went to Michigan State Univ, Dick Harwood went to Rodale Press, one of the early promoters of organic agriculture, Pete Hildebrand went to the Univ of Florida at Gainesville, Bert Krantz returned to India, Jerry McIntosh returned to Indonesia, Dave Norman remained a Kansas State Univ, Don Plucknett became President and Principal Scientist of Agricultural Research and Development International, a research and consulting firm in Wash,

D.C., rumor had it that Don Winkelmann became the first economist to head up a CGIAR Center, and Hubert Zandstra joined IDRC in Ottawa. Ken McDermott supported me throughout, especially when I needed it. He let me know he appreciated what we had been done. But, unfortunately, after the Guidelines' publication, I lost contact with him.

Chap 13:

The Next Five Years: 1982 - 1987

The next five years were a mixed bag involving the continuation of my duties as a professor, as well as new and challenging activities. My departmental duties were the same as before, except for teaching a Senior ME design course. I don't know why Byron teach it, other than spreading the teaching load. I wasn't qualified in thermal dynamics, mechanics, materials, and the like. So, I taught what I knew. I asked each student to design, build, and test a lawn sprinkler of his choice. The student came up with a wide array of both common and imaginative designs some of which worked and some were utter failures. I survived teaching this course in a way that was so different from the way it had been taught before hoping that the students would get a taste of what engineering is like in the "real world."

I was the principal advisor of only four PhD candidates: Tom Sheng, an American of Chinese descent, whose dissertation title was *A Risk-Goal Approach to Whole Farm Analysis of Small-Scale Farms in Developing Countries*; Ali Firouzi, of Azerbaijan, whose dissertation title was *Dryland Farming Technology Management: Case Study of Azerbaijan, Iran*; Hamad Al bin Ali, of Qatar, whose dissertation title was *Project Analysis Procedure for an OPEC country: Case Study of Qatar's Northwest Dome Gas Project*; and Rajiv Mehta, of India, who never finished under my direction. For awhile I was the principal advisor of Amnat Apichatvullop, a Thai until I deferred to Warren Hall who was better suited to Amnat's dissertation.

I found being asked to serve on graduate committees flattering and fulfilling, although contributing little to either tenure or advancement. It was here that I came into contact with outstanding students from around the world. There was Okazie Abarikwu: a brilliant professor from Nigeria. He was open and friendly; and impressed me by his command of *first principles*

when it came to analyzing an engineering problem. More than our association over the year, I was glad to find a Nigerian like him. Others, equally bright were a Tanzania, majoring in Agricultural Economics, and a Filipino, majoring in water resources. Both were to rise to high positions within their governments. Sam Johnson, an outstanding PhD candidate in Agricultural Economics, Fernando Pons from Peru who eventually wrote his PhD dissertation, *Regional flood frequency analysis based on multivariate lognormal models*. Others were Nabil El Gabalawi, a master's candidate from Egypt whose thesis was *Dynamic Simulation of solar thermal power plants*,, and Susan Smolnik, who was working on her PhD using data from the San Luis Valley where CSU was applying FSR practices in a US environment. Sitting in on Zewdie Abate's defense of thesis, *Optimal allocation and management of agricultural water*, was a unique experience given our rough start in Addis Ababa.

How did I handle sitting in on graduate committees with such a wide range of specialties? I was not an optimization guy, knowledgeable about water resources systems, the physics of solar energy, and the like. But I did have two things going for me: the application of economics to scientific and engineering decisions and my knowledge of conditions in third-world countries. Invariably, when one of the students wrote about practical applications for his or her findings as is usually the case in optimization, the candidate would rely on economic assumptions of some form. Often these assumptions were naive and wrong. It was here I became the most useful.

My attempts at publishing in refereed journals were less successful. True, I had gotten articles published on solar energy, highway engineering, and engineering education, but these were not where I wanted to publish. I had attempted to get a paper on input output analysis and one on shadow prices based on my dissertation in top-ranking economics journals without success. After my time in Kenya, I thought I had written a good paper on soil erosion based on the data I had analyzed there. And another article on small-scale irrigation in Sri Lanka. Both without success. Eventually, I wrote an article on the economics of natural resources. It was

reviewed and accepted by the journal's editor, Ted Napier of Ohio State Univ. But the publishing group located in Japan had ceased operations by the time I got the article ready. It wasn't as though I couldn't write, Don Zimmerman had often assured me of this during our FSR days, and I had written perhaps technical reports as part of my international consulting. For some reason I just couldn't write in a way acceptable to the economic journals. With so few graduate students under my direction and so few refereed articles showing up in journals, it's a wonder I ever made full professor. But I did, eventually. I recall during orientation when I first came to CSU hearing that we would be evaluated based on teaching, research, funding one's own work, and service to the community. My work in the international field and in managing notable projects must have done the trick.

In additional to all of the above, I adhered as best I could to the image of a university professor by attending seminars, giving seminars on campus, participated in an AID funded workshop on development at Auburn University, teaching an occasional class for other CSU professors, hosted Al Thieme of the Latin American Development Bank, and accepted an invitation from Jack Sunderland to speak about FSR to a group of *very rich* members of the Arab League in New York City. I even applied for two job openings that Dave Redgrave brought to my attention. He must have been looking for coverage as well as I. These were an opening for Associate Dean of Agriculture at the Univ of Wisconsin/ Madison's international programs and for Department Head at the Univ of Hawaii. Undoubtedly, the two universities showed interest in my application because of the Guidelines.

Leo Walsh, the Dean of Agriculture invited Vicky and me to come to Madison so that he and his Department Heads could take a closer look at me. He asked me to give my thoughts on the role of the university in international development. The seminar went off reasonably well; although, a question from the Head of Ag Economics challenged me by saying "Why should any of his faculty be interested in international work?" adding that it is a distraction fundamental economics. Responding as best I could, I thought that the Univ of Wisconsin had the capacity

and *an obligation* to help alleviate poverty around the world. Then I referred to some of the accomplishments CSU had made and the enthusiasm of those of our faculty so engaged. Afterwards, Dean Walsh, an ISU graduate, invited Vicky and me to his home for dinner. Later, I had heard that I had made the cut. Now, only three of us were being considered for the job. After returning home and pondering the decision, I thought, "Why should I leave Colorado with CSU's strong international commitment for a university, whose faculty seemed only lukewarm to international work just to be called *Dean Shaner*." One afternoon while mowing the lawn and gazing at the mountains I concluded that I wasn't interested in the job. So, I left a phone message for Dean Walsh that I was withdrawing my name. Cowardly? Probably.

Three years later I had apparently forgotten these feelings when I had applied for Department Head of Ag Economics at the Univ of Hawaii. I was flattered to receive a phone call saying that the search committee had selected me. Perry, Peairs Wilson, and George Beals had helped persuade the committee that I would be a good choice. But when I looked at the terms of my employment, I found that I would not have any salary increase, even though the cost of living there was higher than in Colorado, and that I would have to pay for shipping our household goods. As if that were not enough, the committee was accepting me *sight unseen*. It wouldn't even pay for me to fly there to get a firsthand look at the Department. This gave me even more reasons to reject this opportunity, which I did. Throughout all this Vicky had left the decision up to me saying that she would go along with whatever I decided to do.

By now, without finding any funds of significance, I was growing desperate. *I needed something*. In the end I accepted Clyma's offer to join his group. I'm not sure why Wayne asked me to join his Water Management Synthesis group, nor why I accepted. We both knew we thought differently about so many things. Maybe Wayne was conning his two partners, Jack Keller from USU and Walt Coward from Cornell Univ. The explanation goes something like this. Wayne became project manager when USAID accepted his proposal for the Water

Management Synthesis project that involved millions of dollars over several years. I guess that Wayne's proposal won out because it included <u>USU</u> and Cornell, and these two universities hadn't submitted a proposal. By bringing me in to head up CSU's water management group, Wayne was moving me to a level comparable to those of Jack and Walt *even though my knowledge of irrigation could not compare to theirs*. In fact, when the four of us first got together, Jack said he thought my field was FSR not irrigation. But by putting me on a level with Jack and Walt Wayne had *elevated* himself above them, as well as me.

The objective of the Water Management Project was to improve water-use efficiency, as well as increasing agricultural output. It's program centered on what Wayne called Diagnostic Surveys used for problem identification and training. Wayne's group would get involved when a foreign government, with USAID's encouragement, requested a Diagnostic Workshop. During my brief association with this program, I had heard much about the Workshops and follow-up training, as contained in the reports lining Wayne's office walls, but little about any followup work leading to recorded improvements in output.

The project was well underway by the time I came aboard. Wayne's team had been working in Pakistan, Bangladesh, and Egypt, to name a few of the countries where the Surveys had been conducted. Right off Wayne put me in charge of his senior team: Wayne as the irrigation engineer, Dave Redgrave as the agronomist, Al Madsen as the ag economist, Dave Freeman as the rural sociologist, and Dan Sunada as the civil engineer. The purpose of our weekly meetings was to discuss issues Wayne to our attention. That part we all thought legitimate, as well as Wayne's technical expertise. But I thought his emphasis on *management* was delusional. For example, he wanted to have our meetings run like those of our US Congress. For example, at the outset of each meeting he wanted us to agree on an agenda and the amount of time discussing each item, and to have a time keeper. He even brought in a clock and a bell that he set on the tablet. One minute before the speaker's time was up, the

keeper would announce that the speaker had 60 seconds to summarize. When time was up, the keeper would rap on the bell indicating the speaker should stop talking. *I couldn't believe it!* This was so Mickey Mouse! I thought back to the long and useful sessions Perry, Bill, and I had where we talked till we had exhausted some topic.

In time Wayne's management style got under my skin. The final straw came during a trip that we took to Wash, D.C. Before leaving, Wayne had proposed another one of his *management* procedures with which I disagreed, and I told him so. Sitting next to me on our way back he persisted in wanting to know why I had objected to this latest idea. I gave him my reasons, but they didn't suit him. So, he probed again, and again. Pressing, pressing, trying to get me to agree with him. Wayne's "crowding" finally got to me. That, and the flack that I had been getting from Keller and Coward about my lack of irrigation experience.

So, once back at CSU I resigned, nearly a year to the day after coming onboard. But this time I had a place to go. That was a World Bank funded On-farm Water Management (OFWM) project in Pakistan that Wayne had had a hand in bringing to CSU. With all his other responsibilities, Wayne still wanted to be the *project manager* and that I should report to him. I objected, so with Meiman's encouragement, Wayne agreed that he and I would be co-managers! Meiman finally assured me that I could run the project as I liked, irrespective of our titles to which I agreed.

Interspersed with the above activities, Perry, Bill, and I gave several workshops for CID universities interested in FSR; I partnered with Merle Neihaus, Dean of CSU Agriculture in evaluating an FSR program in Honduras and, as the junior member of the team, I was left to write the report; I was a member of Pepe Salas' team in the Dominican Republic dealing with irrigation; I participated with CSU's efforts to implement an FSR program in the San Luis Valley; and I returned four times to Peru at Julio Lostao's request.

I had a minor role on Pepe's team, both technically and lecturing. What I remember most about Pepe was his light-heartedness and tendency for joking. Especially, I remember him telling about a consulting assignment in Milan. When walking home after dark in this large industrial city, a husky man bumped into him seemingly on purpose, said excuse me, and walked on. Half way down the block, Pepe checked to see if his billfold was still in his back pocket. It was not! So, although small of stature yet large in courage, Pepe turned around and ran after the guy. Catching up to him, he demanded, "Give me the wallet." Caught by surprise, the fellow did as ordered. When Pepe finally got home, his wife greeted him saying, "I tried to call you at the office today, but you must have been out. I wanted to tell you that you had left your wallet at home! True or just one of Pepe's stories, it was difficult to tell.

Julio was working on a large World Bank-funded irrigation project on the coast north of Lima, called Chinecas. This was one of many schemes that captured water streaming down from the highlands, captured by large dams, and used to irrigate the expanses of fertile land along the coast. This time Julio was working in collaborating with DMJM, a California-based engineering firm that was looking after the design and operation of the dam, reservoir, and ancillary facilities. Julio asked me to work with his staff, in helping design agricultural schemes operated by small-scale farmers. My activities in this regard were similar to my earlier work, so no need to describe it again.

The fourth trip, in January 1983, was quite different from all my others. While my work was similar, this time Vicky joined me with the intent of seeing Machu Pichu. During her change of flights in Bogatá Vicky bumped into Axel also destined for Lima. They used the flight to Lima to update each other on what had transpired since Axel had left Ft Collins, including his pending divorce from Carmen.

Julio, his usual gracious host, allowed Vicky and me to stay in his modest, downtown apartment while I was working in Lima. A few nights Vicky and I ate at two charming restaurants resembling colonial residences—Los Condes de San Isidro and La Costa Verde. And, of course, I had to take Vicky to Johann Sebastian Bar, which she said lived up to my raves about it. During the day Vicky visited the Governor's Palace, the Gold Museum, and other sites in Lima. By the sixth day we caught an early flight for Cuzco. Once there, we checked into an "old world" hotel with rooms surrounding a large courtyard that reportedly was on the site where Pizzaro had once lodged. Upon entering the lobby, a receptionist greeted us with a cup of coca tea—the stimulant commonly used to counter our being at 11,000 feet. Surprisingly we learned that this was 3,000 feet higher than Machu Pichu. Sitting around the lobby after dinner, we noted a small crowd surrounding two beautiful young ladies who turned out to be Miss World, a Venezuelan and Contender, Miss Peru.

Julio had arranged our trip so that we would arrive in time to attended Inti Raymi, the annual Inca festival to the sun god. The setting was a large field beyond the city limits with granite outcrops as a backdrop. Sitting about ten feet to our right were these same two ladies. The ceremony began with a large procession of men and women in elaborately Inca dress. Given the preponderance of Peruvians with direct Inca lineage, many if not most of the participants could have been of this Indian group. The highlight of this long ceremony was the sacrifice of a llama all decked out for the event. Reminded me of the stories I had read about the Aztec human sacrifices in ancient site of Mexico City. There was a hush among the crowd as the llama's throat was slashed and the head held high for all to see. Or so it seemed. As we made our way back to our bus we saw the llama's handlers leading the animal away very much alive.

Although the distance from Cuzco to Machu Pichu is not long, with all the switchbacks getting there took nearly four hours. Looking out the window we could see what our guide told us were Inca terraces that are still in use. During this enjoyable trip, our guide played haunting

tunes on his set of reed panpipes (six of different lengths) along with accounts of Inca legends. Only a little surprised this time, our two "Misses" were in the same coach as ours. A bus was waiting at the station to take us up the steep and winding road with its many hairpin turns to a 40-room hotel where Julio had arranged for Vicky and me to stay. Most of the large group accompanying us would return to Cuzco that afternoon.

Our accommodations were comfortable, the view from our large window was breadth taking. We looked out over steep mountains separated by lush, deep valleys. A sight to behold was a helicopter rising from below our view to land behind us. After lunch and a short rest, Vicky and I set out to explore the area. Right off we headed for the Sun Gate. Standing a few hundred feet above the ruins we had an expansive view of the many roofless structures, grassed courtyards, and terraces lining the hillside below. This is the location from which the signature photo is taken of the "hill" in the background. The Gate is also the starting point for hikers who are up the four-day journey back to Cuzco. We wound our way down the path to view the restored structures closer up. We had skipped the guided tours, which most of the visitors had signed up for, although at times we would stand on the edge of a small group listening to what the guide was saying, sometimes in Spanish, French, or English. Interesting to us were the way many of the stones were expertly fitted together, and had remained without a mortar binding. We wondered how the artisans had managed the huge stones that made up part of the buildings.

The next morning Vicky and I rose early to climb the "hill." *But this was no hill*! More like a mountain climb. To get to the starting point, we had to cross a dip with a narrow path that felt uncomfortable because of the steep drop on both sides. Finally, we made it to the base of the narrow path leading up to the top. To our left going up were shrubs and small trees that blocked the view of the valley below. What we didn't realize right off was that only a

couple of feet beyond our path the side dropped straight off. Later, we heard how the bodies of those who had fallen over the edge had never been found. At places along the way, steps were cut into the path and ropes placed to help the climbers get up that steep section. Near the top where the path leveled off somewhat, I took a path to the side that was devoid of vegetation. As I rounded a corner the path suddenly ended. Looking over the edge I could see two thousand feet *straight down*! The thousand feet we had climbed up from the base of the ruins and another thousand feet to the train depot below. Taking a deep breadth, I carefully retreated my steps, leaning lose to the rock outcrop careful not to look down. Finally getting to the stone outcrops that made up the top, we rested enjoying the view and listening to those around us. One of those was a 75-year old European decked out in Lederhosen and hiking boots, well tanned, and looking in fine shape.

After awhile we began our decline, respecting this mini-mountain more than when we made our ascent. Going down can be more difficult than coming up because of the strain it puts on leg muscles less used. That and the more likelihood of slipping. Following directly behind us was a mother and her two teenage boys. One of the boys could have been autistic. Apparently, he had been frightened by the ascent. Now, coming down his composure had reached as he kept repeating, "Holy shit! Holy Shit!" His mother only tried to reassure him, not bothering to correct his way of speaking. As we neared the base, we saw a couple of men who appeared to be in their early twenties. One of those walking near us told us that there are these who make a sport of seeing how fast they can get to the top and back down again.

After dinner several of us were relaxing in the lounge over coffee. Miss World and Miss Peru were off to one side. A reporter who had come along to write about them eventually turned to Vicky and me. "Why are you here? Was it simply to visit Machu Pichu?" When I told him of my many trips to Peru to advise the government on its irrigation projects, including

those in the highlands and on the coast, he began taking notes. Then, he asked me if I would mind having my picture taken with the two Misses? I thought he was joking, but with a straight face I told him it would be my honor. I never saw the article, but *somewhere* in the archives of some Peruvian weekly magazine I suspect is an article about our stay in this remarkable place.

During these six years I was mostly "treading water" with activities of marginal interest to me, then came assignments of more significance—those in Egypt, Pakistan, and Sri Lanka. The first of my three assignments in Egypt was with Wayne and George Radosavich, a specialist in Water Law. We went there to do an in-house evaluation of the Water Management Synthesis project. Our evaluation was routine; but the interesting part was where George and I stayed. Wayne made his way up the Nile to stay at the project's guest house, a nondescript place with everyday meals. I had planned on following suit, but George, a handsome Casanova of sorts, persuaded me to join him at the Cairo Marriott.

Bordering the Nile, the *palace* was built by Khedive Ismail Pasha for the pending arrival of Empress Eugenie of France. The main building of the hotel contained the center of activity–restaurants, cafes, and conference rooms adorned with chandeliers, tapestries, prize paintings, statues, and other historical rarities. This Gezira palace is set amidst acres of grounds magnificently maintained with tall palms and a large, sunken swimming pool. To each side of this layout were two 20-story towers with elegant rooms for the hotel's guests. George knew how to live. I learned of his Casanova tendencies during the several meals we shared at the hotel. When I last saw him, he had recently married a lovely young Vietnamese lady.

My second trip to Egypt in Aug, '85 was more substantial. Although I had separated myself from Wayne's Water Management Synthesis activities, I had remained on good terms with those of his WMS team. Sunada, who had taken over my role, asked me head up a

three-man team to evaluate accomplishments against objectives of the Egyptian Water Use Project (EWUP) and its follow-up, the Egyptian Irrigation Improvement Project (EIIP). He thought that I could get off to a running start because I had helped design the first of these two. Dan had arranged for Charlie Busch, an irrigation engineering consultant from Mississippi, and Frank Santopolo, a CSU sociologist, to be the other two members of the team. Dan told me that we were lucky to have Ed Stains, a seasoned AID engineer, as our contact in Cairo.

Our feasibility study nine years earlier had found that Egypt's agricultural production was falling behind its population growth. Better use of water from the Nile offered a solution, given that increased flows from the Delta and the "new areas" were only minor. EWUP's focus was on improving irrigation infrastructure, operations and maintenance, water management, and agronomic practices. In implementing this program, CSU worked closely with the Ministries of Irrigation and Agriculture. Richardson sought to implement in Egypt practices that had proved successful in Colorado. One of these was long furrows. Wayne Clyma wanted to improve water management by measuring water and reliance on interdisciplinary research. And Jim Layton, one of the sociologists assigned to Cairo, wanted to establish and work through Water Users' Associations. Mel Skold, Bob Young and other CSU economists looked at the economic efficiency of water use. The regions to be considered were Kafr El-Sheikh, representative of the Delta region north of Cairo, where farmers there had recently shifted from traditional cops to broad beans, cotton, sugarcane, and soybeans; El-Mansuriya, representative of the southern outskirts of Cairo, where farmers grew vegetables for the urban market as well as alfalfa and summer maize; and El-Minya 230 miles south of Cairo, representative of areas where farmers grew the traditional crops of alfalfa, wheat, cotton, and maize.

Charlie, Frank, and I left Denver mid-morning. Arriving in Cairo the next day we cleared Customs without incident, except the impoundment of my computer. Ed Stains

figuring we were seasoned consultants didn't need a facilitator. So, we grabbed a cab and asked the driver to take us to the Nile Hilton, which would be our base of operations. I was happy to be here with its up-scale accommodations and its nearness to AID headquarters. Over the next week I made four trips to the airport, paid \$400, and got 20 signatures before I could get my computer back.

We three went through the usual routine of initial meetings with AID staff followed by meetings with our Egyptian contacts. Ed had all of this lined up on a PERT diagram that listed our activities, their interactions, and timing—all the way down to the submission of our final report and wrap-up meetings with Egyptian officials. The second day we met with Ed and his AID group where they briefed us on our assignment and gave us background reports to read. On our third day, Ed drove us to Ministry of Irrigation headquarters where he introduced us to His Excellency Ismail Badaway, Vice Minister of Irrigation. HE essentially ran the huge Ministry of Irrigation, leaving the Minister to attend to politics. After a few pleasantries, he brought in the Directors of the engineering units, including Dr. Abu Zaid, the same Abu Zaid who had been our main contact for the feasibility study. Since then he had risen to a position just beneath the Vice Minister and was responsible for coordinating the work of other Directors. I remember Abu Zaid as being a self-confident, well-trained, and accomplished engineer. Later in the day, Ed showed me the standard outline of what AID expects from an evaluation. Returning to the Hilton the three of us went over what AID expected us. At this point I nearly panicked feeling there was not nearly enough time for us to complete all this. The next day I told Ed as much and he calmly said, "Don't worry. Do the best you can."

We followed the usual routine for this type of consulting. We repaired to our hotel rooms to review the documents Ed Stains had given us, which were the Project Paper and several progress reports. With that we arranged for further meetings with Egyptians in Cairo and those

in Kafr El-Sheikh, El-Mansuriya, and El-Minya. Ed had arranged for a retired Egyptian dignitary to aid us in arranging for our field trips and meetings with Egyptian staff. While I can't remember his name, I do remember how much help he was to us, and that he said he had been one of his government's representatives in negotiating the Nile treaty with the Sudanese. His friendliness did a lot to make me appreciate the Egyptian character, rather than to judge them by what I observe in the streets.

An incident on our trip to El-Minya aboard the comfortable first-class train was our stopover at one of the engineering offices. I had a meeting there with the Chief Engineer. After covering the questions I had prepared, the Chief asked if I would like to visit their laboratory. Out of respect I said I was and started to get up. He raised a hand suggesting I stay seated then said he'd be right back. After 20 minutes had passed, I began to wonder if I had misunderstood him. Finally, he came back into the room and told me to follow him. Walking down a covered walkway we entering a large room where I saw machines of all sorts, each with an operator standing next to it. I thought this whole scene was unreal, as though *nothing* had been going on beforehand. Earlier, I had heard that the Government guarantees each engineering graduate a job with the government should one not be found in the private sector. With limited opportunities in the latter, many ended up in government with little to do, as evidenced by my walk through the hallways of the Ministries of Irrigation during mid-morning and seeing engineers at their desks reading the morning newspaper.

Having seen enough Charlie, Frank, and I agreed on what would go into our report, prepared the outline, divided up the work, and began to write. With just over a week left of our assignment, Ed Stains began to fret. We had fallen behind his PERT schedule. I assured him as best I could not to worry. What followed was basically the same 'ol story. I holed up in my hotel room, leaving only long enough to carry drafts over to the AID office, relaxing while I

walked. This went on for eight straight days. I had reference reports strewn out over my double bed intermingled with drafts of our report. One evening I took a breather and turned on my TV and was surprised to see Mystery Hour with Vincent Price. Suddenly I was transported out of the Arab world and back to the US. Was a good feeling. Frank and Charlie brought me the drafts of their sections just two and a half days before the final meetings with AID and the Ministry of Irrigation. Charlie's work was professional and according to our outline. But Frank's work, which was about the sociology of the Water Users' Associations was a mess! Without confronting Frank, I asked Charlie to rework a few things then put Frank's report in an appendix where it would probably be overlooked.

AID's help throughout this last week was critical. Ed had made an expatriate American woman and a young Egyptian woman with excellent command of English available to me.

Often they worked well past quitting hours to finish the drafts so that I could return to the hotel for proofing. The last few days, Ed stepped in to help organize and reproduce the drafts needed for meetings with AID's Program Officer then with the Vice Minister of Irrigation.

Ed accompanied me to the meeting at AID. By now, I was on my own, since Charlie and Frank had left. A few AID officials sat to either side of the Program Officer. With a curt smile he bid me sit down. I arranged my notes for my presentation then looked up. Sitting directly across from me the Program Officer turned his coffee cup so the wording on it faced me directly. It said, "No Longer Mr. Nice Guy." An odd gesture I thought to myself. What was that supposed to mean? When I had finished, the Officer insulted me in three ways. First, "Being from the university, did I have an *real world* experience?" Second, "You used the words *synthesis* and *holistic*. Do you really know what these words mean?" Third, "Since you're from CSU, the same university whose project you're evaluating, is there any wonder that your report would conclude that CSU had done a good job?" I stammered a few words in reply then looked to Ed for help. He turned his head to one side implying that I had said enough. After

they had left, Ed said, "Don't pay any attention to the guy. As long as I'm satisfied that's all you need to be concerned about."

Back in Ed's office the two of us made a few modifications to the report in preparation for our wrap-up meeting with the Deputy Minister. That evening, I went to the hotel's English-style pub off to one side of the main lobby. I had gone there before for a drink, a hearty soup, heavy bread, cheese, and some of the relishes. The atmosphere was a nice diversion, reminiscent of pubs I had been to in England.

The meeting Ed and I went to the next day was of a different nature. We met His Excellency Ismail Badaway. We sat around a conference table in his expansive office, HE at the head of the table, Dr. Abu Zaid to his right, and the other Directors to both side. Ed and I were at the end. I had prepared an executive summary of our report, which I used for my talking points. I thanked him and his staff for the generous support they had given our team, summarized how we had conducted the study, then got to the substance of our evaluation. That included "findings" and "recommendations." For instance, we found that the project's activities were in line with GOE's concern about more efficient use of Nile waters so as to produce more food for an expanding population; these activities were internally consistent, and lead to improved institutional capabilities. However, the results are behind schedule so that AID's Grant Agreement with the Government ought to be extended. And so on.

As for our 21 recommendations, we suggested, for example, that a Coordinating Committee be authorized to do *pre-feasibility* studies before full feasibility studies are initiated, and to search for Egyptians with *far more* project evaluation experience. And that the Ministries of Irrigation and Agriculture ought to top off the salaries of those receiving training under the Grant so as to retain them, rather than losing them to the private section. This latter

recommendation had *really ticked off* the Program Officer at AID when I had mentioned it. So much so that he blurted out at me, "What are you *thinking*? That recommendation is *completely irresponsible*!"

When I had finished, after some 20 minutes, the Minister turned to Abu Zaid for his reaction, where upon Abu Zaid said, "Thank you very much," and was about to dismiss our meeting. Essentially he was saying, "Thank you for your time and effort. We *might* look over your report and decide *ourselves* what to do. But before he could get up, Ed Stains said, "Wait just a minute. We'll stay here until you respond to *each* of these recommendations. And if you *don't* AID will cut off *all* future funding. That shocked not only Abu Zaid and the Minister but me as well. I had *never* heard an AID official talk so bluntly to anyone in high office like this. From there on, we settled down to an orderly discussion of the report. After awhile, Ed having made his point, closed out the meeting by saying he would meet with the Minister in a few days to continue this discussion. As we walked out of the room Ed gave me a smile and a wink saying, "Well, we pulled that one off."

That evening, I treated myself to dinner at the Hilton's up-scale diningroom, a place that I hadn't been before. The diners were in fancy dress, the waiters in black-tie dress, and the lights were low with soft music surrounding us. The only item I remember ordering was lobster bisque. It was delicious and the first time I had tasted it. It remains a favorite. Afterwards, I arranged at the desk to have a taxi get me to the airport by 6:45 the next morning, then I returned to my room and packed. By now I had begun to unwind and to get sleepy. As I packed, I recalled with pleasure that Ed Stains had invited Charlie, Frank, and me for dinner at their lovely, well appointed apartment in the center of town. As we left, he gave each of us a painting on papyrus

depicting ancient Egyptian artifacts. With that act the three of us concluded that Ed had been pleased with what we had produced. Ed also asked if I could come back to work on the amendment to the forthcoming project paper. Another indication of his satisfaction.

My flight the next day "chassed the sun" most of the day and got me back to Fort Collins late at night. Vicky and I talked till 3:00 a.m. I got up three hours later, prepared lecture notes, and gave my first 8:00 lecture of the fall quarter. And I thought academic life would be easy!

My next work in Egypt, ten months later, was different. This time I was the leader of a six-man team that included himself Stains as a member; Terry Hardt of AID/Cairo. Skook Karaki, CSU's leader of the Regional Irrigation Improvement Program (RIIP); Raouf Khouzam, an Egyptian consultant; and Fletcher Riggs, consultant. Of the group, Ed had set it up so that Fletcher, a savvy AID retiree would spend the most time with me. Interesting, that Skook was CSU's team leader on the solar energy project in which I was a member several years ago. Now, he was under my direction for the five weeks I would be in Egypt. That's the way it works in academia and consulting. One time you're the leader; next time the roles are reversed.

This assignment this time was easier, although similar in many ways to the last one. The earlier one was an *evaluation* of a completed irrigation program; this one was the *preparation* of a project paper on irrigation. I was already acquainted with the irrigation zones, the major issues, the overall objectives, and key players such as HE Ismail Badaway. Also, I knew that I could work well with both Stains and Karaki. On top of that, I found Fletcher capable, pleasant, and one who knew the insides and outs of the AID culture. With him on-board, I doubt AID's Program Officer would try pulling the stunt he did the last time.

As before, we met with Egyptian officials, traveled to project areas, and read reports. Fletcher and I shared most of the workload in writing the report, Terry would provide technical input and an appendix on the agricultural sector, Skook would provide technical input on irrigation, Raouf Khouzam would help me collect economic and financial data, and Ed would keep things moving through the Mission and the Ministry. Fletcher knew how to put together a project paper acceptable to AID/Wash. I did my usual on economic and financial analyses from the farmer and national perspectives. I did, however, end up having to write a section on environmental impact, which I had not done before. I had little to go on, since this was early in the "Movement." Still, I did the best I could, dealing mostly with the impact on farmers' exposure to *schistosomiasis*, so widespread in Africa. I read the literature and "coughed up" enough to warn the reader about the danger. I had less to say about what to do about the problem, other than to be aware of it. But those in Irrigation already *knew* problem. Besides, the project we were proposed *did not* depart from anything that wasn't already going on. I covered the subject in two and a half pages and addressed *women's issues* in less than a page, which satisfied Stains.

Now, the time constraints were much less binding, since the other five team members would remain in-country. By the time I left, we had produced a 120-page report that pretty well covered the subject. A few pages of the text had words, lines, or tables related to economic and financial data that needed to be filled in. But the format was there and Raouf, who had helped me with my analysis, knew how to fill in the blanks. And the others would stay with Ed till the work was finished. I worked right up to the last (*again*!), then packed and went to bed by 12:30 where I sat up and dozed till 2:30, dressed and went downstairs, got into my cab that took me to the airport 50 minutes away. Another consulting job under my belt.

During the last week of this, and typically of other assignments, I just stayed in the hotel to write without interruption. I seldom ate regular meals. Instead I would often go down to the lobby of the Hilton and out the door to have a pita bread sandwich filled with beef carved from a spindle accompanied by black olives, and a beer to quench my thirst. Then, I might walk around the perimeter of the hotel. That was enough to break the tedium so that I could continue working. Also, I was able to relieve the tension in other ways. After Fletcher and I got to know each other better, he would occasionally invite me to the small suite he and his wife were occupying for popcorn and Scotch. I welcomed these occasions because they gave me a chance to think and talk about something other than our project. Occasionally, when I felt less pressured, I would swim in the hotel's large pool. Once, while doing so I got to talking with several psychologists. I mentioned one of my frequent dreams in which I was taking a university course and was about to take the final exam when I suddenly realized I hadn't been attending class. What was I going to do? Their response, "Oh, that's common for anyone who has spent much time in college."

Another memorable experience could have been truly embarrassing. I had made my way through the bus stop just outside the hotel's back gate where I saw heavyset Egyptian women shrouded in black. Even in the summer heat! I continued past small shops with men sitting on stools next to the entrance dressed in what looked like pajamas. Others might be sitting inside smoking the *hookah*. Along the way I passed an occasional smartly dressed lady similar to those I've seen along the *Champs Elise*. So engrossed with the sights that I didn't realize that I had walked well over a mile. As I began to retrace my steps, I felt my stomach beginning to rumble. Soon, a thin pain slowly eased itself across my abdomen. Even though I wasn't sure I had a problem, I gradually quickened my pace. Searching for stores that might give me access to a toilet, I found none. The rumbling and pain increased, and I began to have that dreaded feeling of onset of diarrhea. By now I was still several blocks from the hotel, which was now my only

hope. I tried "gliding" on my feet to keep from jarring myself. My steps were so close together, I could have walked on a rail. I drew my buttocks into a pucker. As I came closer and closer to the hotel, I began counting steps so as to take my mind off my problem. I even started holding my breadth. *Finally*, I reached the bus stop in front of the steps leading into the hotel grounds. So far, so good. But I was still not out of the woods. I thought walking up the steps might trigger my bowels. What an embarrassment that would create before the crowd standing there. Once I made it to the top of the steps, I still had to traverse the *100 yards* to the lobby. Time was standing still, but I kept on counting my steps. Twenty, nineteen, eighteen, . . . I was getting closer, but I wasn't home free. I still had to walk the fifty yards across the lobby to the men's room. Whew! I think I've made it. But then, I worried. "What if all of the stalls were in use?" One *was* available! Whew! My ordeal was over. I truly had dodged a bullet. If this account seems to be so vivid after nearly a quarter of a century, I hope so. One doesn't forget such a thing.

Between the time I joined Wayne's group in the summer of 1982 until the time I did my last Egypt study, which I will describe below, I made six trips to Pakistan. The first trip was a short one to Islamabad where I joined John Reuss, CID's project manager there. The World Bank had awarded a contract to CID for the implementation of a national program called On-Farm Water Management (OFWM). The program of improvements included cleaning delivery and drainage ditches, upgrading irrigation structures, installing water control devices, and reshaping water delivery lines to farmers' fields. The number of farmers working within a commanded area averaged 75, with average holdings of five acres. The program also promoted precision land leveling where appropriate and working with Farmers' User Groups on how to manage the water they receive. John, who had been long-term in Pakistan, was pleased as punch to get back there. He checked us into the Holiday Inn in Islamabad, a hotel that proved to be

one of my favorites in the capitol. John was all smiles as he greeted the locals in Urdu. *Gee* was one of the words he kept repeating. I think it meant good or yes.

Jim Meiman had asked me if I were interested in being CSU's project manager, remaining on-Campus to backstop a field team yet to be identified. The timing of my involvement was propitious, for I had just left Clyma's group. So, I jumped at the opportunity. My job on this trip with John was to work out the details, from CSU's perspective. This meant I was getting my first exposure to those in Pakistan's Water Management Wing with whom I would be working with later on: Kango, the OFWM Director General for the Federal Cell, Baz Mohanned Khan, Field Director of the Federal Cell, and the First Additional Secretary of Food, Agriculture, and Cooperatives in the Ministry of Planning. For a week John and I were busy with these meetings, reviewing a pro-forma contract, and agreeing with the Pakistanis to contract provisions. Besides, we paid a courtesy call to the AID Mission. I found it interesting that Curtis, who was one of my AID contacts in Honduras, was now third in command at AID and that Ray Renfrew, whom I knew as a PhD candidate in economics at CSU, was also with AID. Small world again. Curtis told us he wasn't happy that the World Bank was sponsoring a contract that covered so much of the same territory as their Water Management Synthesis project. He wished that the two activities could be merged. But that didn't happen. As if to strengthen his argument he bad-mouthed Kango saying he was grossly ineffective, wouldn't make decisions. Couldn't depend on him for anything.

Another wrinkle to my involvement with this project surfaced when Wayne, claiming credit for CID's and CSU's involvement with the Bank, said he should be CSU's Project Manager because of his involvement in Pakistan that the Bank had chosen CID for the contract. Granted that I would be doing the work of the Project Manager, he still wanted to title. I objected. So Meiman decided that Wayne and I would be *co-managers*. Wayne would share

the title, but leave me with complete responsibility. Jim and I acquiesced . . . for the time being. Before long, I had the title for myself. Such arguments might seem trivial, but in academia such things influence one's salaries and academic advancements.

After we had finished, John and I went our separate ways. I took a flight to Karachi for a connecting flight. I had several layovers during the middle of the night, so the airlines arranged for me to check into a "hotel" close to the terminal. The single story building of clapboard and low ceiling reminded me of our barracks at the Naval Air Station in Fort Lauderdale with its dimly-lit lunge and its leather-covered easy chairs and a couch. Several others waiting as was I were on bar stools at one end of the lounge. The hostess assigned me to one of the small rooms where I could try to catch a few hours of sleep. She said that she'd wake me in time to catch my flight. With my bag already checked in, I could walk to the terminal in a few minutes. I've never seen anything like this before, nor since. Once the new terminal in Karachi was built, this "oasis" most certainly would have been torn down.

The next trip to Pakistan in the fall of 1983 was much more interesting, and a challenge. By now I had brought on-board Wendell Gwen as Chief of Party in Islamabad and Harold Bergsma as the training specialist. Richardson suggested Wendell, whom he knew as a first-class water resources engineer from Oklahoma. Harold's name emerged through a CID search of qualified candidates among its member universities. He had progressed up the ranks in the Education at New Mexico State Univ. Harold had a wealth of international experience, having grown up with a missionary father in Ethiopia and pre-partition India where he had acquired a lovely imitation of the local accent. After earning his first degree, Harold became a missionary himself spending many years in up-country in Nigeria. The project also called for a third position to be filled by an economist, specialized in monitoring and evaluation (M&E).

During President Johnson's term in office, a great surge occurred in programs aimed at a variety of social issues, which became known as the Great Society. To get a handle on how individual programs were faring, the President demanded that his staff find some way to measure whether these programs were accomplishing their goals. The M&E approach was much like clinical research in the medical field, something that had been going on successfully for years. But, there are differences. Medical researchers acquire information by means of controlled experiments. M&E seeks to develop reliable information by *observing and measuring an on-going process* that are subject to disturbances of nature and man. Thus, M&E does not always produce the neat and definitive answers regarding program impacts envisioned at the outset. Much is learned through experience. Methodology that appears appropriate initially may prove to be deficient as experience is gained.

Jerry Eckert, my "buddy" who forced his way into our FSR Workshop suggested that the two of us team up for this assignment. He said that he knew Pakistan and I knew benefit-cost analysis—a mistake, as it turned out, because M&E and B-C analyses share little in common. So, I agreed, only to have Jerry back out after I had committed myself. But the result was not all that bad. With the help of Ken Nobe, I was able to get Norm Landgren to fill Jerry's slot. Norm, a PhD in Economics had connections with Ken, proved to be an excellent choice. He was a good economist, had worked long-term in Pakistan, and had impressive credentials. These included heading up the Pawnee National Grasslands program in northeastern Colorado, as well has having been a member of a Presidential Study Group. Moreover, he was modest, good natured, and flat out fun to be around.

Norm and I ended up in Islamabad the later part of 1983 on what would be the first of several assignments in Pakistan. I left Fort Collins at noon; "rendevous-ed" with Norm in Chicago and arrived in Islamabad at 5:30 a.m. the second day. Wendell Gwen met us at the

airport. He took us to his home where he had arranged for us to stay. It was comfortable enough and the food was good, even though I would have preferred staying at the Holiday Inn. In the end this arrangement proved better for us. Leona, Wendell's wife, arranged for, but didn't cook, our meals while giving us motherly attention; and Wendell was available whenever we needed him. It was Baz Mohammed Khan's custom to show up at dinner time on the pretext that he had business to discuss with Wendell. Norm and I spent the next day recouping. The following day Wendell took us to talk with Kango, Head of the Federal Cell's OFWM program, and Baz as his Field Director, Joe Anania of AID (whom I knew from Ethiopia), and Anis Youssef, the World Bank's country representative, a Coptic Christian, and senior irrigation engineer. Sensing that neither Norm nor I knew much of anything about M&E, Anis handed us two items the Bank had prepared as guidelines on the subject. These were both well done and geared for the uninformed. They were:

World Bank. 1981. A handbook on monitoring and evaluation of agriculture and rural development projects. World Bank, Washington, D.C.

Casley, Dennis J. and Denis A. Lury. 1982. Monitoring and evaluation of agricultural and rural development projects. The John Hopkins Univ. Press, Baltimore.

Apparently, the Bank had only recently found it desirable to rely on M&E to gauge how well the projects it was funding had performed. The Pakistani On-Farm Water Management project that preceded ours had produced an M&E report, which the Bank asked us to review. Given that the Bank had published these two items so recently, practical experience in their use was still scarce.

On Thursday Norm and I caught a 6:15 a.m. flight to Lahore, the capitol of Punjab Province, the largest of the four provinces in terms of population and output. Salim of the Punjabi OFWM group met us and took us to see Harold Bergsma and Mushtaq Gill, Director of the Water Management Training Institute, Punjab. Mushtaq with a PhD in Ag Engineering from CSU had taken my projects planning course; so, we knew each other. The next day, Friday, was the sole "day of rest" in this Muslim country. So Salim and his buddy, Ikbal, took Norm and me to see the Shalimar Gardens, the Lahore Fort, the two tombs from the Mughal period, and the Grand Masque. By the end of the day we marveled at the historical richness of the area.

The following day Norm and I met Ashraf, chief engineer for the Water and Power Development Authority, a semi-autonomous government organization, Rahmat Ali, the M&E team leader for WAPDA, and Muhammad Cheema, the Director of the Punjab's OFWM program. Norm and I spent much of the next day talking with Wayram, who had field responsibility directly under Rahmat Ali. Wayram was a "mystic," a youngish and slender fellow with a long, dark beard and penetrating eyes. He had worked along Wayne Clyma over the years and *worshiped* him.

The next day we met with the principals: Muhammad Cheema, Director General Agriculture for the Punjab Province, and Ashraf, Chief Engineer for WAPDA. Cheema was a "jolly" fellow who laughed a lot, yet had plenty of clout within the province. The Pakistani government had given WAPDA the responsibility for implementing the M&E effort and put Ashraf in charge. Ashraf knew Clyma and others at CSU; I had met him during one of his visits to CSU. He treated Norm and me well, sometimes inviting us along with two of his WAPDA associates to dinner at his favorite Chinese restaurant. What I found curious was his penchant for ordering green tea after the meal, emphasizing to our waiter as though it were something special, that it must be *green tea*, not black tea. Apparently, the latter goes with formal meetings during the work day.

Formalities out of the way, Norm and I met those with whom we would be interacting on a daily basis. Chaudhry Rahmat Ali, responsible for M&E. Rahmat Ali was a middle aged

technocrat, slight, serious, yet accommodating. Once when I had gotten into the project I went to his office at noontime to call someone and found that the unit's sole phone had a lock on the dial. Rahmat had left for noon prayers and didn't want his staff making calls during his absences. Waryam, M&E's field engineer was to be my office mate. Waryam was a slight fellow with a long black beard signifying his religiosity. And indeed, he observed the seven pillars of Islam that requires praying five times a day. Even so, he was open to western influences. Having worked with Clyma over the years he practically worshiped him. One time, so the story goes, he and Wayne were "walking a ditch" when they inadvertently knocked a whole in a ditch carrying water to one of the farmer's fields. Panicking, Wayne got Waryam to lie down across the opening while he packed soil around him thereby stopping the leak. There must be more to the story, but that's all I heard. I was to rely heavily on Waryam when it came to my understanding of irrigation in Pakistan.

Next on our agenda was a series of field trips. These were something else. Since the bank-funded OFWM program in Pakistan was country-wide, Youssef had determined that Norm and I should see the all of the country where irrigation was going on. Kango had arranged for us to meet leaders of the field teams where the improvement program was going on. Three days later, after Norm and I had met Ikram, who was to be our key contact for the Lahore area. He was a handsome, sturdy, possibly 30 years old, bilingual, and the director of the M&E field operations here. Our driver took us the relatively short distance to Faisalabad, which was to be the first leg of an extended field trip for us. Once in Faisalabad, we left the main road to visit three "field days" the first day and four the next day. That completed, he next drove us a considerable distance south (but still in the Punjab) to Multan where we visited *twelve more* field days.

These field days were actually celebrations put on by the Water Users' Associations (comprising irrigation farmers) who had been organized to manage and maintain water from the

canal's delivery lines. The head of the WUA greeted Norm and me as though we were potentates for they thought we, representing the World Bank, would be able to shower them with benefits if they treated us right. They placed garlands of fresh flowers around our necks, led us along the watercourse (small ditches leading to the farmers' irrigated fields) that were marked by chalk lines to a wooden dias where Norm and I sat some four feet above the ground. Then the festivities began. We were treated to freshly washed grapes (washed with water from the irrigation ditches I fear), prancing camels with a red ball on their noses with their forelegs stretching out in front and the rear legs stretching backward, (reminded me of a Dr.Seuss drawing), dancing horses, riders spearing a shingle stuck in the ground with their lances, sporting matches between two groups of young boys in a game that looked like a combination of soccer and unprotected football, and finally a dog fight as the highlight of the day's events. At the end of the fight, one of the handlers brought one of the dogs, which resembled a boxer, up to us panting, excited, but not threatening. The dog's ears were gone, apparently from earlier fights.

After that Ikram brought a few of the WUA leaders to meet us. We asked through an interpreter what they thought of the OFWM project. "Oh, very nice," came the reply. What do you like about the project? "It has given us more water." And how does the extra water benefit you? "We can irrigate more area. Our crop yields are higher. We can grow a second crop. And we can plant higher valued crops." We got the same response wherever we went. Soon, Norm and I concluded that Ikram and his team had trained the farmers well. Seemed like we were being "set up." Ikram had chosen the places for us to visit, had gotten the WUAs to put on the field days, and certainly picked out some of the most successful areas within the watercourse. But did it really matter? If, at lease some areas had benefitted from the OFWM program, maybe that was enough. Without challenging the veracity of what these farmers had told us, it was clear that the improvements farmers held most important were the leveling and reshaping of cross-sections, and cement-linings.

Along the way, Norm would ask the driver to stop at local shop where he could buy a single pack of Gold Leaf cigarettes. Because he was trying to quit, he limited his purchase to that single pack. But it wasn't working, because each day we made at least one stop. Before long, Norm came down with the trots and had to "rest" up for a day so he could recover. I survived without any such problem. Perhaps I had become immune from having been in the field more often during the past year or two.

Somewhere outside Multan is a plaque with my name inscribed, in recognition of my part in providing the funds for the watercourse improvements made possible by the Bank. I smilingly accepted the honor, even though I knew the farmers hadn't understood that it wasn't my money to give. Along this same stretch of road, we came upon a small group all dressed up in fancy clothes and dancing to the beat of drums and tambourines. The heavily made-up dancers wore skirts, their hair falling loosely around their shoulders. Out of the corner of his mouth our driver to us, "They aren't what they seem." These were men of sorts, not women. Another time, Norm and I were sitting under the shade of tree talking with a dozen or so of wheat and cotton farmers. They looked prosperous and sure of themselves. One even had the fertilizer dealership for his area. Through our interpreter, they told us that they were just simple country folk. Oh yea! I thought. Then I told them about how Southern farmers in the USA would talk about being just poor country boys while getting the best of those coming to visit them. When someone gives me a line like that, I grab onto my wallet. Apparently, our translator got the message across. When it did, their eyes opened wide, they gave me a brief look of curiosity, then broke out laughing. They got the message and knew I was wise to them. But I had also paid them a compliment by acknowledging that they were not poor simple folk. It was during these travels that at noon our driver would customarily stop along the side of the road so that the Pakistanis with us could quietly get out of

our vehicle, spread out their prayer rugs in line with Mecca, and pray, which wouldn't take long. Then we would continue on our way.

From Multan, Norm and I took a Domestic Pakistani airlines flight directly to Darius Ismail Khan where we met the regional director for the M&E program. He wanted to show us some of the improved watercourses that had benefitted from the Bank's funding. No field days here. Just a chance to meet with some of those from the WUAs. About all I remember from these visits was driving down a single-lane, eight-foot-wide asphalt road with narrow earth shoulders on either side. I had come to believe that *no Pakistani* drives slowly or cautiously. As on-coming vehicles approached us (thankfully they were neither trucks nor busses) our driver hogged the center of the road forcing the other driver to move to the shoulder. Perhaps, those approaching us could recognize our Land Rover as being an official Government vehicle and consequently would not challenge it. But, head-on accidents do happen throughout the country with horrific results, which the local newspapers seemed happy to cover on their front pages.

We returned to the Director's office at a more leisurely pace, where he invited us in for tea and cookies. As it was turning dark, his driver then took Norm and me to the Government Rest House where we were to have dinner and spend the night. The place looked nice enough. Rooms faced onto an open gravel parking area in an L-shaped arrangement. A slender, pleasant-looking young Pakistani who was probably a Pashtun. Making eye contact I thanked him for bring in my single suitcase, which he placed on a small rack at the far end of the room. I didn't tip him because I had been led to believe that was not expected. I was standing next to my bed preparing to set down my briefcase when he dragged his open hand across my buttocks. Then, at the door, he raised both his arms in an attempt to embrace me. That was enough! I took him by the shoulder and shoved him out the door. Later, over dinner, I told Norm about what had happened. The next morning Norm told me he had bolted the window and door to his room and wedged a

chair under the doorknob. I think I simply closed the window and bolted door. That was all that came of it.

Youssef had planned on having his driver take us to Peshawar. The drive was about 300 km, about the distance on the Grand Trunk road between Islamabad and Lahore. I felt uncomfortable getting in with this driver again; but I had steeled myself for the trip. Then we got word that the route that we would take through the Tribal Areas south of Peshawar was unsafe. So, we flew there. Once there we met with the Regional Director till mid-afternoon then checked into the Intercontinental Hotel. We asked the desk clerk if the hotel had a bar. "Yes, it's on the top floor." Before he would serve us, the bartender said we had to sign a form saying we were Christians. Where upon we each ordered Scotch, which was very expensive. The bar manager probably figured, being Christians we were rich and didn't mind spending our money that way. The next day Mahboob, the guide the Director had assigned to us drove us north of Peshawar about 80 km to a town called Mardan. Leaving our vehicle by the side of the road, Norm and I along with four Pakistanis walked to a village where farmers were participating in the program. Norm and I observing the condition of the delivery structures and ditches, flows of irrigation water, and the fields ready for winter crops. Suddenly, we heard the staccato of gun fire not too far away. Seeing the way Norm and I looked at each other, Mahboob, sloughed it off. "Oh, that's nothing. Just a wedding celebration. Don't let it bother you." Nor did the farmers walking beside us with rifles slung over their shoulders and bandoleers crisscrossing their chest. Oh yeah, I thought, just a wedding party. This is some one territory, given that several of the farmers we met spoke English!

Later in the day, we met with Shah, head of the OFWM program in the Northwest Frontier Province, which was where we were. He was a handsome fellow with a sweeping mustache and just a tinge of dark skin as though he had a good tan. He was dignified, self-assured while being

open and friendly. He described the program as helping farm families in the area and hoped we would recommend that the Bank continue its funding. After spending over two hours with him Norm and I flew back to Islamabad.

Norm and I were to return to Peshawar a second time, this time accompanied by several Pakistanis one of whom was a talkative fellow whom AID had promised a fellowship in the States. Along the way we stayed in a simple guesthouse with a large central room where we all rested during the late afternoon. It was hot, but the room had three ceiling fans, which helped. A cook was assigned to feed us. But there was no kitchen, only a pile of rocks in the shape of a fireplace behind the house. As we waited for our meal, which was to include *chapatis*, the talkative Pakistani told us several stories. The one that sticks out in my mind was the one about a large farmer who *loved* chapatis. Regularly, he would eat half a dozen at a time. One time he was especially hungry and ate more than the usual number, until he felt sick. So, his friends rushed him to the doctor, who identified the problem immediately. "No problem," said the doctor. "Here. Take this pill and in a few hours you should be okay." "Gar," replied the big man, "If I could put something more in my mouth. It would be another chapati!"

I took two more trips alone. Norm and I had decided that he had seen enough and could better use his time getting started on our end-of-tour report. Three days after returning to Islamabad I flew to Karachi to learn about the OFWM program in the Sind Province. Not being on a restrictive allowance, I had checked into the Sheraton Hotel. Soonero, my contact there, came to meet me at the Hotel. He was about my age, soft-looking, with a ready smile. He spoke English, the result of having been educated abroad. He drove me to his office at a complex of one-story, clapboard buildings, and introduced me to those working with the OFWM project. Baz from Islamabad joined us. Soonero didn't bother to take me to any of the watercourse improvement sites. Instead, he gave me some of their reports that I could take with me. After

work, he drove me around the city that included a parking area where we could view the Arabian Sea. The beach was not inviting and largely unoccupied, except for a few fishermen. From there, he took me to his modest apartment. He introduced me to his unveiled wife. She soon excused herself saying she was going to prepare dinner for us. I was surprised when she eventually returned, placed food on our table, then left to eat by herself. My surprise came because I had thought Soonero was a modern guy.

The next two days were uneventful, except for the message that Anis Youssef sent me. It said that the Bank would not authorize my trip to Hyderabad saying that roving gangs were kidnaping expatriates and holding them for ransom. This left me without being able to observe how the OFWM trials and WUAs in the Sind might be different from the others I had seen.

From there I flew to Quetta, the capitol of Baluchistan. This province has the largest land mass and the least population. As my plane approached the city I could be wide stretches of dry, flat land with mountains on the northwestern horizon. An agricultural engineer met me at the airport then promptly delivered me to a nondescript building that looked more like a rundown apartment complex than a hotel. The guard at the gate who was expecting me gave me a key to my room, showed me the door, then left. The halls were unlit and in the setting sun, I could scarcely see. I was left on my own to search for a place to eat. Stepping out into the dusty street, I walked a few blocks to what, with considerable exaggeration, might be called a downtown area that was filled with smoke from the many charcoal fires from braziers used for warmth and cooking. By now the sun had set and it was dark except for the dim lights from the small fires being tended by street venders. Only a few were walking the streets. I failed to find any form of restaurant, so ended up buying kebab, apples, and pistachios for which the province is famous. I ate this skimpy "meal" in my room. What an experience!

Not much of reception here. The same engineer that picked me up yesterday came again to take me to their offices. Muzafaroh, the Deputy Director for the OFWM program begged off saying his wife was seriously ill. So, I talked with the OFWM field team—the same Ag engineer and a sub-engineer. The sites they showed me were run-of-the-mill, although I did find an on-farm storage reservoirs and their drip irrigation experiment, which the Bank had been pushing, interesting, except that the drip experiment was a fiasco because the lines, lacking proper filtration, had plugged up. I had opposed drip for remote areas such as this because I thought the technology too advanced. All this was made difficult because of the language barrier. Later, the engineer and sub-engineer took me to the AID office in Quetta where I was surprised to see an old friend of mine from Addis–Dave Gephart. We had served on the school board together! As the Mission engineer to AID/Pakistan, he was making one of his periodic visits to the area. By now, having visited all four of the country's provinces I had learned that there is no love lost between the Provinces and the Federal Cell. Except when the donor requires cooperation with the Cell, as with the World Bank in the present case, each would prefer to go it alone. I found more animosity between a province and the fed than one province with another. Reminded me of our "states' rights" issues.

With all the trips out of the way, I was ready to review and analyze what we had seen, then to get down to writing. Norm and I still had to figure out why Rahmat Ali's reports had shown so many contradictory results. It wasn't long before we understood why. WAPDA's group was engaged in "formalism," a term I learned while studying government at Stanford. Formalism often occurs in developing countries when the local officials go through the *motions* of conducting popular elections without making sure the process is legitimate. In this case, WAPDA's OFWM group had carried out a country-wide M&E study by *following the motions* without *understanding* the reasons for the procedures. They had gone *completely random* for the whole country. That's okay when the sampled population is reasonably similar; but can be *devastating* when populations

are vastly different. In this case *stratification* was necessary so that the populations within strata are as uniform as possible. Some examples. The team randomly selected a few watercourses as controls to be used for measuring the OFWM program's effected on *treated areas*, i.e., those who's watercourses had been improved under the program. But without any effort at *stratification*. In one case, we found the *control* to be in the hill country, which relied on irrigation only as a supplement to rainfall, whereas the treated areas were all within the Indus basin where rainfall is so low that little or nothing will grow without irrigation. In another case, the M&E teams dutifully took random readings on water deliveries for crops grown both during the wet-season and the dry season. The type of crop and its water requirement vary substantially for these two seasons. Yet, control data were measured against the treated areas without noting the season. For example, measurements of water deliveries in the control areas for a *wet* season would be compared with water deliveries in the *dry* season–different crops, different water requirements. These are just two types of the many errors. Sometimes, the WAPDA team would simply write down the results of their study that showed conditions were *better off without* improvement, i.e., the *controls* showed *better results* than the treated areas.

Norm and I spent considerable time unraveling the reasons behind these illogical results. When we matched suitable controls for the treated areas, e.g., controls in similar agro-climatic zones, matching seasons (wet season for the controls against wet season for improved areas) as well as matching location along the water course (head against head, middle against middle, and tail against tail). The importance of this latter is that farmers at the head of the system have access to greater flows from the main canal as well as sometimes taking water, because they have the access, for which they don't have the right. Whereas those at the tail invariably receive much less water than *is their right*. If the controls are at the end of the water course are compared with controls elsewhere, the participating farmers do not operate under *similar* conditions. By correcting for these inconsistencies: wet-season deliveries to the controls against the wet-season

deliveries for the treated areas, and distinguishing among farmers at the head, middle, and tale of the water course, the reasons for WAPDA's inconsistencies became clear.

Another glaring shortcoming of these reports was the lack of any form of analysis. For some reason, probably insecurity, the reports simply *presented the data without analysis*! Norm and I guessed that they thought they had done their job by simply reporting survey results. It wasn't their job to analyze anything. This omission left an opening for Norm and me to make another contribution. Also, missing in all of this were measurements of the impact on farmers' yields and incomes. The reason for this omission made some sense. The principle one was that the questionnaires used in gathering data were already lengthy and required bringing in economists, which the Directorate did not have. Besides, they reasoned, if water was the main factor limiting farmers' output, then by providing more water, the farmers would know how to use it, and the benefits of increased output and farm sales could be assumed. Also, we suspected that Rahmat's crews were fearful about an analysis that might be used to place blame on those higher up the chain of command.

Norm and I analyzed and wrote our report jointly. I recall thinking I had uncovered about ten points that explained that what was needed to improve the procedures Rahmat and his team were using. When I showed these to Norm I was surprised when he didn't agree. But we soon worked out our differences. About the second night of writing I was at the kitchen table of the Gwen house when Wendell said, "Why don't you use my computer upstairs?" I told him that I had taken a short course on computer use, but hadn't learned much. He then told me that it wasn't that difficult. I'll get you started. Use the "menu" when you need it. Then, "If you have a problem, I'll help you." The word processing program was Wordstar, a program I would use for much too long before switching to Word Perfect. With that I got started. I typed our whole report, although not without some difficulty. Finally, it was time to present our findings to Anis Youssef, Kango, Rahmat Ali, and others. Using the computer I summarized the main points that

Norm and I had agreed to. Working right up the time of our meeting I was ready to print the notes that I would use. But when I went to bring up the file, I COULDN'T FIND IT! I searched and searched, but it wasn't there. With Wendell at the office I panicked, doubting I could recall the many points I wanted to make. After much searching I found the file. With my limited experience, I hadn't realized that I had saved my notes on the hard drive, but was searching the drive for the floppies. That was nearly the first of the "dues" one pays when learning a new system.

Through our written reports, presentations at various government levels, and interacting directly with our counterparts at WAPDA Norm and I persuaded the Pakistanis that much work needed to be done before the M&E program would show meaningful results. With that, Norm's work was set for the next 18 months and mine for the next three years. Norm and I had arranged it so that we would alternate our visits to Pakistan rather than work as a team. He was scheduled to return in two months, I in six months.

Finally, with all our obligations met I shopped for something to bring home. I returned to the Holiday Inn to browse through its gift shop. I ended up buying a brass try that could serve as a small coffee table and a 4' x 8' single knot rug with a popular design. We departed for Karachi at 7:00 to overnight in a downtown hotel. Norm, I recall, spent nearly a "fortune" for a double shot of Scotch. Our flight on Pakistan International Airlines left at 6:30 a.m. with layovers in Frankfurt and JFK International. I finally made it back to Fort Collins just before midnight then Vicky and I talked for three hours. I arose at 6:30, after just three hour's sleep, to prepare for my engineering design course.

Vicky accompanied me on my next assignment in Pakistan, which would last for more than two months. Just too long a separation for both of us. Vicky took leave from her secretarial

position at the Presbyterian Church. Becky was finishing up in her teaching assignment in Lesotho, Tim was at Pingree Park, Mike had married Marty and was working as a "bag boy" at the La Quinta Country Club in Calif, and Paul was living alone at home while working at our Country Club. So, all was clear for her to join me.

It is customary to allow a "day of rest" for those flying economy class for more than twelve hours. So I had booked an overnighter in London where Vicky and I had an early check-in at the Grosvenor, napped, then saw Agatha Christie's play, The Mousetrap. Then, another overnight flight put us in Islamabad at 5:00 a.m. No surprise this time that Wendell Gwen was there to pick us up. Over the next couple of days I meet with Kango and Baz then headed overland for Lahore with Wendell and Leona, accompanying us. The four and a half hour drive is one that Vicky and I agree we could do without. Trucks and large busses have the habit of forcing smaller oncoming traffic off to the side. The fright is justified, for I had seen the remains of a head-on collision with debris still scattered along the roadside. It is not uncommon is to see photos of crashes such as these on the front pages of the daily newspapers with headlines reading, "Vehicle turns turtle, driver escapes." The relevance of this phrase is that if caught, he is likely to be killed on the spot! It was after this scary ride that Vicky said, "Why are we here? We don't need this." She had a point. But we would stay. And return again.

Wendell directed our driver to take us to Harold Bergsma's residence, where Vicky and I would stay for the next three weeks during Harold's absence in the States. The house was modern, single story with three bedrooms, and detached servants' quarters for the cook, laundryman, night watchman, gardener/day-guard, and their families. Wendell stayed around long enough to arrange for me to attend the upcoming ceremonies by Mushtaq Gil at the Training Center. Later, Wendell accompanied me when we visited with Cheema, Ashraf, and Rahmat

before going to the AID offices where I meet Jimmy Stone who was the Deputy Director. Small world again. But really there aren't that many of us in this game.

Ashraf arranged for me to work directly with Rahmat in the M&E office. This was a former two-story residence in a pleasant neighborhood across the street from a park and close to a small shopping area. To take an occasionally break I would walk around the park and, when they were playing, watch young men playing cricket. The main canal runs through the area and the University, which is close by. I ended up working mostly with Waryam. We studied the country's huge irrigation network, distinguishing the main canals, branches, and tributaries that deliver water via small ditches to farmers' fields. I also established relations with Sadiq, the unit's chief statistician. I wondered at the unit's filing system. On two of the walls of a room serving as a bullpen for five worker were rows upon rows of boxes containing files each one with a carefully tied ribbon holding the contents in place. That's it. No filing cabinets or computer logs. The system was antiquated!

Waryam had a table brought into his small office where I worked alongside him. We are now in the month of June and the weather is *hot*—over 100°, but thankfully not humid. The building has no air conditioners, but does have swamp coolers in which water drips across a radiator-type grill onto a heavy cloth in which a large fan evaporates the water thereby cooling the air. Ramadan started three days after my arrival, which meant no water, food, or smoking during the day. Being in the same room as Waryam I followed the same restrictions as did he. Fortunately, our workday hours were now 6:30 to 1:30 at which time I would walk the short distance back "home," where Pindi, our Christian cook who probably got his name because he's from Rawalpindi, would have arranged a sumptuous noonday meal for Vicky and me. As I walked in the door he would hand me a tall, cool glass of watermelon juice. Vicky and I would then sit down to a heaping pile of fried rice, a meat dish, and assorted vegetables. Vicky and I had

explained that he needn't fix so much for us. But then he explains that what we don't eat goes out back for the others. Of course! That's the way the system works.

During these days in the office with Waryam and in the afternoons "at home," I studied statistics from Snedecor and Cochran text¹ and the above-mentioned booklets. Ashraf had asked me to look into the efficiencies of water deliveries to the watercourses before and after improvement. Others advisors working in Pakistan had looked into the same subject, as had Wendell. So, I had helpful references, such as the Ministry of Food, Agriculture & Cooperatives's *On-farm Water Management Field Manual*. For the OFWM program the principal improvements to the delivery ditches from the *moghas* (points of entry from a distributary of the main canal) to various points where water enters the farmers' fields. While small these ditches carry a considerable amount of water. The typical improvements to the ditch are to a rectangular concrete channel for the first fifteen percent of the distance, while the rest of the channel is simply a reshaped trapezoid. Relying on my knowledge of the hydraulics of open-channel flow, I was able to calculate flow rates for varying *mogha* discharges, channel lengths, gradients, roughness coefficients, predominant soil type, percolation rates, and the control gates that lead to farmers' fields.

The next step for me was to compare my calculations based on open-channel flow with the results obtained by Sadiq. Sometimes I could verify my results with those obtained by Sadiq. At other times we were at odds. As I probed deeper into why we were at odds, I found that Sadiq's results were at odds with themselves. This didn't mean that Sadiq's calculations were wrong; but it *did* mean that the data obtained by Rahmat's field teams were in contradiction. But I did tell him that I thought he was wrong when he reported that one result was better than the other after

¹George W. Snedecor and William G. Cochran. Statistical Methods, Seventh Ed. 1980. Iowa State Univ Press. Ames, Iowa.

having said that there was no significant difference between them. With no significant difference between the two, an alternative outcome could just as well have happened!

I did address Ashraf's question about delivery efficiencies, which were the main test of the OFWM project. When favorable he could use these results to justify the follow-up phase, called OFWM-II. The *before and after* tests did show significant benefits, i.e., increased deliveries to the farmers' fields that were *statistically* relevant. And by inference, given that the British had set up the system for farmers to experience *water shortages*, whenever water availability increased crop production should increase. Elsewhere, tests showed that the area planted, yields, multiple cropping, and higher valued crops all increased with larger canal deliveries. But the tests called into question the farmers' statements about these increases when canal deliveries were actually *below* normal. This confirmed Norm's and my suspicion that we were being set up during our trip the previous year. I was able to explain that the *amount* of water loss near the *mogha* was larger than at the tail end, but that the *rate of loss* at the head was less than at the tail. One of my findings, which I thought significant proved to be erroneous. In reviewing my report on the subject, Wendell said my calculations were faulty because they were auto-correlated, something I didn't know about. With that, I realized that we should have included statistician on our team.

Pindi seemed to be the "head hancho" at our complex. With the cash allowance Harold had given him, he pretty well ran the place. When I needed a haircut, Pindi arranged for a Christian friend to come to the house. I sat on a chair just outside the kitchen door. When the barber finished, he asks me softly and politely if I needed anything else. I declined, but wondered if there was more to the question. In this peaceful setting near a vine-covered fence and shaded by small trees, I observed a hoopoe bird with its golden crest, black and white body, and long sharp bill. Looking for insects on the ground, it seemed to be "listening with its feet," regularly make a "hoopoe" sound, then jab its beak into the ground for worms or bugs of some sort.

Our surroundings were pleasant. To exercise, I would often get up at the crack of dawn and walk a couple of miles around the neighborhood past large three story houses that were set in one-acre plots amid large, broad-leafed trees. The houses looked as though they were built during Colonial times. All were badly run down. One morning as I walked down a side street I saw a small tent on a bare spot of land that served as a family's makeshift quarters. A woman was off to one side preparing breakfast. Several feet away, a naked girl of about four was squatting on her haunches. Brown liquid streaming from her bottom, a first-class case of diarrhea. I felt sorry for her, but walked on not knowing what to do. The family was gone the next time I walked by. But the image stays with me.

It seemed as though the temperature scarcely cooled off during the night. All was fine as long as the power was on and the air conditioners in the living room and our bedroom were working. But regularly as clockwork, the power went off around 9:00–probably the time when the power load was the greatest. Without screens on the windows and the air conditioner off, the heat was stifling. Our sheets became soaked with sweat as Vicky and I tossed and turned until near dawn when it finally cooled off. After three weeks of this, Harold returned with his wife, Lily, and their daughter and son. That's when Vicky and I move to the Intercontinental, one of the city's first-class hotels, at which point our lives changed considerably.

From our fifth-floor room we had a fine view of the layout of the grounds below. The area of several acres included a large swimming pool adjacent to the lobby and a mini nine-hole golf course. All this set amidst tall deciduous trees in which bright green parrots flew like fighter pilots from tree top to tree top. We ate at the counter of the hotel's coffee shop for lunch when I had the opportunity where I took a liking to their mulligatawny soup and the ice cream floats we taught our servers to make. We never succeeded in teaching the cook how to make pancakes to our liking; they kept came out thick and heavy. In the evenings we would sometimes eat in the

dining room where a small combo featuring a zither would play wailing Sub-continent tunes. On Fridays (the weekends), Vicky and I would rent clubs and play golf. With such exposure we got to know a small group of Japanese who were staying at the hotel. Riding in the elevator together gave us a chance to exchange nods. One of them, a nicely proportioned karate instructor, asked Vicky how she had played that day. When she told him two or three over par, he just rolled his eyes. Later, he told Vicky how much he admired how she swam. A few times, the Bergsma family would visit so that the youngsters could swim in the pool. One afternoon while I was swimming in the pool I met several who told me they were Doctors Without Borders who had been working with refugees in Afghanistan. They had come to Lahore as part of their R&R. I marveled at their altruism. It was the first time I knew about this organization.

Shortly after moving into the hotel, Warren Fairchild arrived. He was the Bank's Wash, D.C. backstop for the OFWM project who knew a lot about irrigation. I found him easy to like, and he was friendly to me. He was perhaps ten years older than I, professional, and used the Bank's status to get things done. I learned later that he was a Nebraskan who had begun his career as a soil scientist with the Conservation Service, became the Assistant Commissioner for the Bureau of Reclamation, and Director of the US Water Resources Council before joining the World Bank. And a close friend of Ken Nobe.

He asked me to accompany him when he went to see Rana K. Anver, NESPAK's General Manager. The Bank had funded NESPAK to carry out various tasks and Warren was checking up on things. He surprised me when he read Anver the riot act for his lack of progress. He said he'd cut off their funds if things didn't improve. I was surprised with the way he dealt with this firm. After our meeting, Warren asked me to work with Anver to see if I couldn't help them out. A few days later, Anver and Goyraya, an agronomist, came to our hotel room asking for help. We talked for three hours discussing various aspects of their responsibilities under their contract with the

Bank. Upon leaving, they thanked me for my help and asked if it would be okay if they came back again. "Of course," I said. A week later Anver invited Vicky and me to a garden party to celebrate the birthday of one of their daughters. It was a beautiful night, having cooled off that day. Lights had been strung around the large yard and tables set for the food that was to come later. About a hundred guests were there. Anver's two daughters, both in their late teens, took to Vicky right off. One of them was studying medicine at the undergraduate level and wondered about the possibilities of continuing her studies in the States. Vicky tried to explain our system and how many years it takes to become a certified doctor in the States. At that time women were un-veiled. In fact, I had seen teenage boys and girls freely associating on their way to school. Jeans made in the States were in vogue.

My next two trips to Pakistan totaled nine weeks. They occurred during the first half of 1985 and dealt mostly with planning for the follow up to our OFWM contract. But prior to the first of these two trips Fairchild had invited me to visited him in Wash, D.C. While there I met Casley and Lury, who gave me insight about why the Bank began requiring its projects include some form of M&E, which in turn created the need for their book. Later, I got my comeuppance when Fairchild introduced me to Gordon Slade, one of the Bank's statisticians attached to the irrigation unit. When I said that I had recommended a sample size five, he retorted, "My god, man, that's not enough!" As best I could I explained my reasoning for this small number. Resources and trained monitors were limited, and we had done our best to select areas that are reasonably homogeneous. Still, Slade's outburst was embarrassing, although, Warren didn't seem to mind.

Working separately, but in a coordinated way, Norm and I recommended ways to make OFWM-II better: 1) dropping the existing controls and randomly selecting those that were representative of smaller, more uniform areas, 2) making sure that the selection and timing of data

collection made sense regarding locations and timing of the data collected, 3) selecting a new set of water courses in the Punjab, and NWFP that are *representative* of significant numbers of farmers and based on evapotranspiration, irrigation conditions, *mogha* discharges, locations along the distributary, cropping patterns, soil type, water table levels, salinity conditions, and numbers of farmers, 4) reworking the questionnaire so that it focuses more directly on irrigation, crops, and yields, 5) train data collectors by developing a training course that teaches data collection methods with the purpose of standardizing interviewing methods, 6) initiate a series of case studies, in keeping with Casley and Lury's strong recommendation for their use, and 7) include a statistician as part of the expatriate team. In support of our recommendations we wrote job descriptions and estimated the cost of equipment, supplies, travel, and per diem so as to stay within the limits of the money available.

The foregoing was familiar territory, unlike the "exciting learning experiences" Norm and I had received. So, these days in Lahore were more run-of-the mill, except for the following two incidents. The first was Baz's shenanigans, which intensified. He had became forthright in his bid to take over Kango's job as Director. He became more open in his degradation of Kango saying flat out that he was incompetent and was having an affair with his secretary. As if this internal squabble were not enough, Youssef told me that Baz wanted him kicked out of the country. Didn't Baz know where the money for the OFWM projects was coming from? *And* he doesn't want me working with WAPDA any more than necessary. While I openly wondered what this was all about Wendell told me not to pay attention to Baz's ranting.

The second incident occurred the evening of my departure. It was around midnight as I was putting the last minute touches to the report I would leave with Wendell and Rahmat when my computer "locked up." This occurred when I tried to print the report apparently because I hadn't turned on the printer. I tried all sorts of ways to get the computer going. But no luck. Dick

Tinsley who I had brought over to help with Irrigation Extension was just down hall so I knocked on his door. Luckily he was in, wide awake, and said he'd look at it. After an hour or so, he brought back my computer saying he had been able to unblock it my floppy backup I think. Adding to the difficulty of operating under these conditions was the undependability of electricity. Power would suddenly go off several times during the day and night. Without automatic backups I got into the habit of backing up every five or ten minutes. That limited the loss of what I had written, but diverted my attention. This was at the time when computer technology were cascading on us with advances coming so often and drastically that it was difficult to keep up. Redgrave and Tinsley, both agronomists, were among many who spent more time with computer technology than their disciplines.

Of particular attraction for me were my stopovers going to and coming from Pakistan. On the first two of three trips I stopped to see Tim in West Berlin. We rode the trolley around town and walked through the parks. The weather was overcast and cold, which didn't help the head cold I had. That evening at dinner Tim introduced me to Simone Cabral, his Brazilian girlfriend from Bel Horizonte. I found her trim and pretty with clear, white skin, dark, bobbed hair, and sparkling brown eyes. I think she was translating for the United Nations or the European Union at the time. Tim's friend Gunner whom I met there said *everyone who meets Simone falls in love with her!* The next day we looked at the Berlin Wall and Brandenburg gate and visited the War Museum.

This time on my way home from Pakistan I rendezvous'd with Becky in London. She and David, her fiancé, had finished their assignments in Lesotho, traveled north through Africa and then into Europe. David, being the dutiful son that he was flew to New Jersey to celebrate Mother's day while Becky remained for our reunion. The evening of my arrival in London we dined out then went to see Evita at the Rubicon. The next day she accompanied me on the train to

Wye College near Ashford, Kent for the pre-arranged meeting I had with Ian Carruthers, an economist noted for his work in Pakistan. I remember the several hours Becky and I spent at the College. The scene was straight out of Dickens: I remember that the town was small, the setting was rural, and our entrance to the cottage where we waited was through a porters' gate. Once inside we were directed to a comfortable room and seated before a warm fire with books lining both sides of a great fireplace. Naturally, the attendant served us tea. My meeting with Ian in his office, which lasted a couple of hours, as being useful and reassuring.

On the way home on the next trip I stopped off in Berlin again to visit Tim. He arranged for me to stay in a nice multi-story rooming house run by a middle-aged motherly type that was located in a nice part of town on a quiet tree-lined street just off one of the main thoroughfares. Luckily, the Kohlers were throwing a garden party for some of their friends. The Kohlers, who had befriended Tim because of his connection with Simone, were part of West German society. One of them managed visiting performers while the other was an editor of a major publication. They had met Simone somehow and had invited her to stay with them. That evening Tim arranged for a cab to take us to the Kohler's three-story home in an upscale part of Berlin. A servant guided through the house and into the spacious backyard. There, some thirty guest were gathered around tables with drinks in their hands before the barbecue began. An elderly fellow, perhaps pushing seventy, was standing next to Simone and telling us how much he admired her ability in languages—that she spoke Brazilian, Spanish, Italian, English, German, and perhaps more. He effused that she could easily learn Russian if she wanted to, but that would not be enough of a challenge. Overdone? Perhaps. But his message came through. Simone was a *very* talented young lady.

The following day Tim and I rode the train the short distance into East Berlin passing through on-train security without incident. Once there, we walked around the central square

marveling at the lack of traffic. Just to get a feel for the area, we went down a flight of stairs to a Ratskeller where we ordered beer and bratwurst. Once back in West Berlin we were walking around parts of the downtown area, which seemed to have recovered completely from World War II. As we stood on a corner waiting for the light to change, I hairy young fellow in a string bikini wove past us on roller skates, turned around with his back to the direction he was going so that we got a full frontal view of his hairy body. Not a pretty sight! Just another instance of the city's recovery that included freedom of expression such as this.

My last trip to Pakistan as part of the CID assignment was for two weeks in September to help facilitate the transition from CID's responsibilities for the OFWM project to Sheladia's responsibilities for the OFWM-II project. Sheladia, a private consulting firm based in Wash, D.C., had broad experience in the international development field. Smail was my prime contact with Sheladia. He was a weathered overseas veteran who looked like he might have been an alcoholic. As before, my contacts were with Youseff, Kango, Baz, and Anania. The highlight of my assignment was to deliver my recommendations to a group of 50. By now I was the "big gun" in Pakistan concerning M&E. What a joke! Although, by now I think I knew about as much about M&E in Pakistan as anyone did.

All went well except for my old friend Anania. At this late stage he was *still questioning* the validity of M&E. But so did Dave Seckler, who happened to be in Pakistan at the time. He is one of the elite members of Nobe's faculty, with loads of experience in third-world irrigation, brilliant, cocky, and proudly abrasive. Vicky doesn't like him because of the way he treats his young wife, while I admire his knowledge and creativity. He thought the whole M&E process was a overly mechanistic. His idea was to use Landsat imagery to distinguish high, moderately, and low yielding areas. Field teams could then go to the three types of areas and take "crop cuttings" that would identify the crops, estimate yields, and areas, and compute production. If this idea worked, and Seckler offered no evidence of it having worked elsewhere, the M&E activity

currently going on could be stopped thereby eliminating the need for *so much* data collection and analysis. Nothing ever came of Seckler's suggestion. The challenge remaining was for us to make the current approach to M&E work more efficiently.

As a sendoff Smail took me for drinks at the American Club located on the US Embassy grounds, just past the Prime Minister's palace in Islamabad. High walls had been built around a complex of low-level building surrounded by trees and grassed areas. It looked like a fortress. The bar and dining room reminded me of officers' accommodations on our large military bases in the States.

That Friday Youssef and his wife, Aidu, drove me to Murree where we walked around town followed by lunch at a large mansion that offered a nice view of the terrain below. We were back by mid-afternoon. Murree, only 20 miles northeast of Islamabad, is the largest resort town in the area. It used to be the summer retreat for local Punjabi officials during the nineteenth century where the imprint of British rule can still be seen. This was a nice break from work.

As before I worked right up to the time of my departure. I had checked out with Rahmat, arranged for the desk clerk to give him my report that I had just finished, packed, then worked till 5:00 a.m. I had arranged for a ride to the airport at 6:00 a.m. So, not wanting to over-sleep, I placed several pillows against the bed's headboard and half-dozed sitting against them. All came off as planned. The taxi driver took me to the terminal for my flight back to the States.

Approaching the PIA (Pakistan International) ticket counter I noticed one sign reading London, the other reading Moscow. Well, I thought to myself, I didn't want to go to Moscow, so I moved to the other line. Surprise! Our flight *landed* in Moscow. As we made our approach for landing, I saw large stands of attractive white-barked poplars next to the runway, which reminded me of images

described in War and Peace. Taxing to the terminal I could see planes with Aeroflot and East German markings.

After our plane pulled to a stop and the door at the back of the plane opened I saw two soldiers with automatic rifles. Wow! That's different. We had several free hours on the ground so I got off the plane and wandered around the terminal. It was large and bare with only a few walking around. I found a bar. Not a cozy one, but one out in the open set against one of the walls with only a few stools. The choice, as best I could tell, was *beer* or *vodka*. So, I ordered *beer*! No label. Just a stubby, brown bottle. Apparently, *beer is beer* in Russia. Reminded me of my Marxist professor at Stanford who talked about the great amount of money wasted on advertising in Western countries.

By now Tim had moved to London, so he met me at Heathrow. We took the "tube" that conveniently links the terminal with downtown where we walked around for awhile. Then I went to my hotel and Tim returned to where he was "squatting," never showing me the place. Though not entirely legal, the Government allows vagrants to occupy buildings, even requiring the building owners to provide heat, water, and electricity. Strange idea, I thought. I left the next morning. Even with a delayed departure, I was back home that evening.

That took care of Pakistan for the time being. I would return for two more trips several years later, but under different circumstances. I wouldn't miss the long, hot flights between London and Islamabad or Karachi. They were invariably packed with huge carry-ons stuffed into the overhead racks and on empty seats. It seemed as though half those making the flight were heavy smokers, despite the No Smoking signs. I never liked the experience, but I learned to tolerate the eight-hour flights. The last of my Pakistani trips ended in September, 1985 and my second Egyptian trip during this period ended in July, 1986.

Three months after this last trip Vicky and I were off to Sri Lanka. Dan Lattimore had asked me if I were interested in going there to write a report based on two recently completed surveys of small-scale irrigation farmers. The surveys had been carried out by Sri Lankan enumerators from the Irrigation Department, Ministry of Lands and Land Development. Larry Nelson, part of Clyma's Water Management Synthesis team, was the in-country Chief of Party. I jumped at the chance. Dan was the guy who replaced me when I left WMS group. With Jack Keller of Utah State University wondering why Wayne had asked me to join his group, he must have been totally bewildered by Wayne's choice of Lattimore. Although Dan was a bright guy and a serious worker, but his sole qualification for the job was having been editor of so many WMS reports. His field was *Technical Journalism!* Wayne had grown confident of Dan's knowledge of irrigation through their years of working together. Besides, they were friends socially.

In preparing for the assignment, I picked out one of Cornell's evaluation reports on small-scale irrigation with water supply from the Gal Oya reservoir. Reservoirs such as this are called "tanks." and are located mostly in central Sri Lanka. Cornell's inter-disciplinary teams in Sri Lanka had comprised an irrigation engineer, a rural sociologist, and a political scientist. As early leaders in this field they had made quite a name for themselves. Walt Coward, with whom I had brief contact earlier was the sociologist.

It took no persuasion from me to get Vicky to join me: Paul was at school at the Univ of Colorado, Dad was doing fine on his own, and Becky, Tim, and Mike were no longer at home. Using the Frequent Flyer Miles that I had accumulated, Vicky was able to upgraded our flight to first-class. I had worked late in the evening before leaving Ft Collins so that I was ready for the "long rest" the trip would provide me. Our international flight, which began from the JFK airport, touched down in Brussels. I remained soundly asleep during the whole two hours our plane was

refueling. Why wouldn't I? It was probably 2:00 a.m. Colorado time, we had eaten well, the wine had flowed, and the ample leg room and soft, reclining seats made me feel as though I were in bed. Our hostess said that in all her travels she had *never seen anyone sleep* so soundly during time on the ground like this. From there we flew to Cairo, changed planes, and were off for Bombay *still first class*. We checked into the Holiday Inn at 2:00 a.m., slept till mid-morning, relaxed, then were up early the next day to check into the airport by 1:30 a.m. These strange hours meant little, since we were on the other side of the world, *twelve hours* different from home. With our early departure, we landed in Colombo at 7:00 a.m. feeling remarkably rested, at least I was. I think this was the time when I adjusted to this extreme time change *without* jet lag! We grabbed a taxi and headed for the Oberoi Hotel where Larry Nelson had made reservations for us.

And what a lovely place it was! Probably the nicest hotel we had ever stayed in: eight stories high, rooms opening onto an open hallway with a view looking down at a large central area with a grand piano, the reception desk off to one side, bell captain station, luxury shops carrying clothes and precious gems, a travel agency, and an unenclosed breakfast area off to one side. For breakfast, a chef decked out in traditional white garb and tall hat served omelettes upon request. During the holiday season, a concert pianist or a string quartet played alternately during the cocktail hour. Four dining rooms were available for us: one with oriental cuisine, one catering to the young crowd, a steak house on the lower level, and, fanciest of all, the Executive Room located on the top floor. The latter had mahogany paneling, dimmed lights, candles on the table, fancy silverware, and white tablecloths and napkins. The mature waiters wore black tails and ties and white shirts. I doubt that we could have accessed this Executive Room had it not been for the civil war going on.

For some time now the Tamil Tigers had moved out of the northeaster part of the country and down the east coast as far as Batticaloa. Local newspapers carried front-page stories about

bombs going off in the business district. Fortunately, we only read about these bombings. Guards used mirrors attached to the end of polls to scan the underside of all vehicles pulling up in front of the entrance. Before entering the building we passed through an electronic scanner and then were patted down by guards. As a result, the hotel was hurting for business. Vicky, with her usual acumen for striking a deal, negotiated a price for a corner suite of two large rooms with floor to ceiling windows. All this for 40 dollars a day, which was covered by AID's per diem allowance. Part of Vicky's argument was that we would be staying for six weeks and that we would pass the word among our friends about our stay in Colombo. One of our rooms overlooked the spacious, tree-studded hotel grounds, a large swimming pool towards the rear, and a pleasant lagoon beyond that. The view from the other room took in a building under construction. We could hear the noise of saws and hammering during the day, but didn't mind. We could look out the other windows. What made this arrangement so nice was that I could work late into the night with the radio or TV keeping me company while Vicky could shut the door while sleeping in the adjoining room.

Larry Nelson, the project's team leader, came to the hotel by mid-morning to welcome us. He then took me to meet Joe Alwis and Somasundara, his contacts at the Irrigation Department. The next evening Herb Blank and Pixie Ross invited Vicky and me out to dinner. Both were with the AID Mission here; Larry reported to Herb. Pixie was part of the economics staff. That was on the weekend. On Monday, Herb came over to the hotel with a laptop and two diskettes full of raw data from the surveys. Handing them to me he said, "I hope you know how to use spreadsheets." "No, I don't," I said, "But, I'll give it a try." Why didn't someone ask me this question before I left Ft Collins? Just as Wendell Gwen in Pakistan had pressed me to learn word processing now Larry was literally forcing me to learn how to handle spreadsheets! The laptop Larry gave me was similar to the ones I had been using. So that was no problem, but I had a heck of a time making much progress with the Microstat program that his wife, Kathleen Kilkelly, had

given him for me to use. Kathleen was a sociologist with the WMS project and was in Sri Lanka helping with the surveys. Later, she found Lotus123 for me, which was a godsend. Even so, I had my problems especially at night after a long days on the computer made worse by my laptop's small screen-- probably no more than five inches high.

I was just becoming familiar with the computer and the data when Larry told me he had arranged a three-day trip to Polonnaruwa so that I could see firsthand irrigation conditions at Minneriya and Kaudulla where the data had been collected. On the way we stopped at Sigaria, which had been inhabited during pre-historic times. A 70-year-old guide led us along a rickety wooden walkway up the face of the outcrop. As we walked I leaned into the rock face, not wanting to test the strength of the cantilevered, wooden walkway. Prehistoric paintings occasionally adorned the walls next to us. At the top, we found a large partially terraced area from which to view the plains. Our guide, sturdy fellow that he was, told us the history of the place while pointing out objects of interest. We were amazed with his stamina and vigor.

After eating we continued our journey to Polonnaruwa, arriving there a short time later. Larry had arranged for us to stay at a one-story tourist motel. While Larry checked us in the rest of us wandered around the large lounging area with its bamboo chairs, dance floor, and raised platform that would accommodate a band had there been one. Except for the receptionist the place was deserted! Apparently, management had arranged for a caretaker to open up the place whenever a party such as ours wanted to book rooms. Being less than 50 miles from Tamil territory might have had something to do with why the place was deserted. Looking around reminded me of Tom Sheng telling me about staying at a place like this and finding a cobra in his bathroom. Those with him concluded that the cobra had found a hole in the bathroom drain. The Sri Lankans with Tom corralled the snake and released it outside! Tom said that the Sri Lankans with him were among those Buddhists who for religious reasons do not kill cobras. You think

Vicky and I didn't turn on the light and open the door carefully when we went to the bathroom during the night. I rose early the next morning and went for a walk, as I like to do. The air was still crisp from the night. As I walked along the road I could see monkeys in the trees bordering the road. They chattered away while observing me from a distance. The trees were of moderate size and the undergrowth was green but not dense. I could see an occasional path leading to and from the road.

Later that morning our Sri Lankan counterparts had our driver take us to see some of the irrigated areas representative of the ones where the enumerators had worked. As we left the main road and entered what was little more than a track we could see women ankle deep in the paddy fields transplanting rice seedlings. Rice shoots were already showing in other areas. As I was soon to learn through my study of the survey data, farmers grow rice on 90 percent of their holdings; chillies account for over half of the rest. In the dirt yard in front of a farmer's small thatched-roof house we saw bright red chillies spread out on mats to dry. Continuing on our way we drove close to a small village off to the side amidst tall trees, coconut palm, and banana plants. It looked idyllic, but probably not for those living there. Those familiar with other irrigation societies found the Sri Lankans unusually cooperative. I was to learn that most farmers in this part of the world live in villages and go out each day to work in their fields. Some walk while others ride a contraption made up of a plow powered by a two-cycle engine with a two-wheel flatbed attached. Farmers with sufficient funds had purchased these Japanese tractors to "puddle" their fields.² Using tractors is both quicker and labor-saving than the once prevailing practice of using water buffalo for this purpose. Farmers also use their tractors for hauling materials, as well as for just getting around.

² Puddling is a way of compacting the soil to reduce water penetration.

Soon, we got out of our vehicle and began walking the raised areas between the paddies so that we could get a closer look at the rice fields. As we walked along the path we could see farmers patching the many holes caused by the large rats prevalent in the area. We didn't see any, but I was told that rats also consume grain stored in bins. While observing where I was going on, I kept my eyes on the ridge we were walking because one of the farmers who had joined us told about a villager having died from a cobra strike. On our return home we saw "working elephants. These are a different breed than African elephants. They are smaller and trained to work. The ones we saw picked up good-sized logs with their trunks and were carrying them to a place where the logs would be cut into planks. We also passed by men and women bathing themselves, some at the edge of a lake and others under a waterfall. Observing them corroborated what we had heard about Sri Lankans bathing themselves several times a day.

Getting away from the hotel like this gave Vicky and me had a chance to observe Sri Lankans more closely. On average they tend to be short and small-framed with delicate features and light brown skin. (Tamils to the north have darker skins.) We found them soft spoken and polite. That and the beauty of the countryside helped explain why Sri Lanka was once an attractive tourist destination.

Once back from this three-day excursion, I set to work in earnest. The format of the data sets for Minneriya and Kaudulla covering the 1986 irrigation season were identical. The enumerators contacted 25 farmers each at the head, middle, and tail of the delivery ditches and asked 272 questions during two separate interviews. Most of the questions were in closed-form which made tabulation easier. The questions covered eleven topics that began with land holdings, included cropping practices and yields for paddy rice, and ended with farmers' cash transactions. I used two spreadsheets, one each for Minneriya and Kaudulla, with 75 columns and 330 rows to transcribe the data into usable form. I found just correctly *entering and verifying* these data a

formidable task. After that was done to my satisfaction, I summarized the data, prepare 21 tables for each of the two reports, made the analyses, and begin writing.

I divided each report into three parts. The first on which I spent the most time was to rationalize the data according to farmers at the head, middle, and tail. Beginning with land holdings I summarized the amount of land the farmers received during their initial allotment as well as land obtained through purchase and rental. From there I dealt with their crops. Knowing that paddy rice was clearly the dominant crop, I evaluated only that. From there I summarized eleven activities in paddy production, then broke down each activity according to farmers' own and purchased inputs, family and contract labor, and male and female labor. Next, I summarized paddy yields and whether paddy rice was sold or consumed by the family.

The second part analyzed these data, which, because I was dealing with weighted averages took considerable time. I compared paddy yields according to means of land preparation (tractor or oxen), planting method (transplanting or broadcasting), and weed control (hand weeding or pesticides). I was surprised to find that the most common practice was one that relied on tractors, broadcasting, and pesticides even though this combination resulted in lower yields. This finding suggested that farmers experienced labor shortage during the critical stages of seed-bed preparation, transplanting when that is the method, and harvesting. Because the survey did not address labor shortages I suggested that future surveys consider this issue. Comparing yields by location I found that yields for tail-end farmers were lower for Kaudulla, but *higher* for Minneriya. A surprising result and another topic for study.

In the third part I analyzed the farmers' economic and financial situation. I began by calculating the farmers' net return using the going wage of a dollar a day for unskilled labor, and the market rate for rented oxen and purchased seed. The family made a profit, but not much. Then, I recalculated by withdrawing these costs and calculated the returns to family resources, of course

increasing the family's return. After that I *imputed* the value of family labor and found it close, but still less, than a dollar a day. Given the many assumptions I had to make for this calculation, I listed this as another topic for study. As these values surfaced, I compared them with national averages for yields, family size, and income. The results showed that, while the surveyed farmers' income was *somewhat* below the national average, they were reasonable given that farmers claimed that the yields for the 1986 season were below normal. From there, I reasoned that since these results were *averages* then *half* of the families were not doing so well. I suggested this as still another topic to be addressed. I finished off the analysis by tracing the farmers' cash flow. The tightness of these funds helped explained why most of the farmers borrowed from money lenders and local banks to the extent they did, *even though the rates were close to usurious*. Or so it seemed. However, given that these loans were only for a couple of months, transactional costs and occasional loss made the rates seem reasonable.

Given my inexperience with Lotus, the difficulty I had with the small screen that caused me sometimes not to know where I was, and the long hours I worked, it's a wonder I was able to complete the first report. Still, I found the whole process highly interesting, for I was doing something I hadn't done before, i.e., working with *actual* rather than *assumed* data. I had the lovely view of the hotel's grounds, the swimming pool, the lagoon, and a muted television to kept me company once Vicky had gone to bed.

Vicky and I found breakfasts in the open area by the lobby to be pleasant. Sometimes we joined Tim Gates and Bob Mohammed, who were here working for Wayne. Once we overheard a fellow sitting behind us talk about CSU. Turning around, I recognized him as a stat professor who had advised me several times. Kathleen and Larry occasionally invited Vicky and me for dinner at their home. Picky and Herb Blank did the same thing. One evening while Clyma was in town he joined several of us for dinner at a Thai restaurant. We all ordered sweet and sour soup, which was

so hot that it brought tears to our eyes. All of us, save Wayne, resorted to taking tiny sips. But not Wayne. He addressed the challenge solemnly, taking large spoonfuls that reddened his face and sent tears streaming down his cheeks. Another time, Vicky and I joined Redgrave and Audrey Lutz of Sheladia for dinner at the Colombo Hilton where we talked about possible collaboration. But that never materialized. Even Herald Bergsma was in town looking for funds. We joined him for drinks at the Galleface Hotel. The hotel, which was just across the street from us, bordered the ocean and was famous for its elegance and Colonial history. The waiters were dressed formally in white uniforms and headdresses that looked like a page out of Kipling's Gunga Din. Children were on the green next to the hotel flying their kites. While there Harold said he wanted to visit Kandy with its artifacts and tea plantations. Besides these attractions its 1,500-foot elevation offered welcome relief from the heat. I couldn't spare the time, but Vicky could. So she went with him for the day. A couple times a week I would walk over to inform Somansundara of my progress and ask for his advice. Rather than take a cab I would walk the 3 km along clean city streets while passing attractive homes and well-kept yards and gardens. But I encountered few people along the way. Perhaps it was the heat.

I had finished my analysis of Minneriya and had begun writing the report on it when Dave Seckler called saying that he wanted me present in London within two weeks. Before we had left for Sri Lanka, I had agreed to go to Yemen should things work out. I was to be chief of party there on the Core Agricultural project that had been providing technical assistance and training for the Ministry of Agriculture and Fisheries. The funding by AID was *large*. The project, which had been in place for a number of years, was being headed by Oregon State Univ. AID felt a changing of the guard was necessary because AID/Sana'a was dissatisfied with the way OSU had been managing project funds. CID had proposed that CSU take over as a means of holding onto the project. Seckler had put CSU's proposal together and was arranging for a meeting with AID and the Ministry in Sana'a. Vicky and I talked it over and decided that we would both fly to London.

She would spend a few days with Tim then continue on to Ft Collins. I was to meet with the CSU group in London then accompany them to Sana'a. After that I would return to Colombo to continue my work there.

On the day of our departure from Colombo while waiting at the airport Vicky and I struck up a conversation with a lady of about our age. She and her husband were returning to the States after having spent a year living in a trailer 50 miles this side of Batticaloa. At first they had some concern about living so close to the Tamil Tigers; but eventually got used to it. She told how lovely the place was—the landscape, flowers, weather, the peacefulness of it all. But her husband worked long hours and she was left her with little to do. She summed it up by saying to herself each morning, "Oh well, another shitty day in paradise."

Our flight to London came with an over-night in Bombay. This time we stayed in a traditional Indian hotel called the Sea Rock, appropriately called because it was right on the waterfront. It was light as our taxi driver took us to the hotel, which allowed us see firsthand some of the utter poverty we had heard about. Alongside a four-lane highway we saw ditches filled with drainage water. And between the edge of the ditch and a brick wall, a distance of about twelve feet, were 6' x 10' hovels made of cardboard boxes that served as "homes" for these poor residents. Thick exhaust from the traffic hung in the air, the ground was wet from a recent rain, and some women were sitting on their haunches cooking over a small fire while their naked children played close by. A few of the shacks had a motor bikes parked along side. We even spotted a small taxi parked next to one of the shacks. *This is poverty that one seldom sees!*

After settling into our hotel room we went down to dinner. The dimly lit dining room was a two-tier affair, a bar was off to one side, and several customers were seated at the tables. The receptionist seated us next to a railing that was three feet above the main dining area. As we got

accustomed to the light, we were able to observed two men sitting just below us speaking in French. We watched their waiter bring them a bottle of wine. He used his knife to cut through the seal and unscrew the cap! One of the men opened his mouth in surprise, but said nothing. Then, after the waiter had left, he solemnly addressed his companion, "Would you care to smell the cap?" Just a snippets of humor one gets once in awhile. With a three o'clock flight to catch the next day we went to bed early.

Tim met us at Heathrow. Collecting our bags Vicky and I followed him to a lower level of the terminal where we boarded the train for downtown London. Nice and convenient we thought. Once in London Tim hailed a taxi that took us to the hotel where I was to meet Seckler and his team. At that point we split up. Tim took Vicky to see where he was "squatting." She wasn't impressed. Afterwards, Tim took Vicky to a pub where he works as a part-time bartender. He told Vicky that he had learned how to pour a "proper pint", that being a mug of beer without foam on top. Meanwhile I had found Seckler and the other two members of his team. One was Earl Kellogg, having replaced Anderson as Executive Director. I had met Earl during the FSR project, and liked him. The other was Bill Spencer about five years my junior and an extension specialist in ag economics who would be my campus backstop. He had a friendly, easy manner about him. Our meeting was brief in which Seckler laid out his plans for our trip to Yemen. That evening I returned to my room to review the terms of reference for the project and write down some of my ideas. We met all the next day while Tim and Vicky contacted the Yemeni Councilor Office to get a visa stamped in my passport.

The day after that our team boarded a Jordanian Airlines for Sana'a, Our stopover in Amman allowed me to set foot in Jordan for the first time. It was midnight when we landed in Sana'a. Amir Badiei, the team leader who I was to replace, meet us inside the restricted area of the terminal. Impressive, I thought. He must have connections. Amir was tall, well-built, good

looking, and suave. Born in Iran he had become a naturalized US citizen and operated out of Oregon State Univ in Corvallis. I noticed his habit of placing his right hand over his heart when meeting someone, a gesture I hadn't seen before.

Amir did not have a regular position with OSU, neither tenured nor on the tenure track. Apparently, the University acquired him once they had landed the CID contract and needed someone familiar with the Middle East who was willing to sign up for a multi-year assignment. Donors tend to find this a shoddy practice. In bidding for a project, competing organizations have a habit of presenting an impressive array of talent for each of the positions listed in their RFP. But when the bid is won, the successful organization often finds it difficult to persuade those listed in the proposal to actually accept the position, especially for a country like Yemen. I found this true in Peru and can imagine how this happened with OSU. Amir then checked us into the surprisingly up-scale Sheraton, the city's only four-star hotel.

The next day we went to the AID building to meet Mike Lukomski and John Swanson. Seckler introduced himself, then Kellogg, Spencer, and me. Lukomski, a young, vigorous fellow, explained that he was Acting Director, filling in for Ken Sherper who was out of the country. Lukomski exuded the confidence we had seen elsewhere of those who feel they are already on their way up the AID ladder. With Mike was John Swanson, AID economist and manager of the Core project, and Ray Renfro, a PhD economist from CSU. Mike explained that the Deputy Minister runs the Ministry, which allows the Minister to concentrate on policies and politics.

With formalities out of the way we headed for the Ministry in downtown Sana'a. Amir nods to the rifle carrying guard at the front door and takes us directly to the Deputy's second floor conference room. When the Deputy finally enters the room, he has a surprised look on his face. "What's this all about?" he says in fluent English.) This might have been an act; or, it was just

possible that AID had decided to change universities without informing him. In any case, Lukomski without preliminaries introduced those of us saying that Oregon State Univ was out and CSU was in and that I was to replace Amir Badiei as chief of party. But to ease the transition Amir would become my deputy and others from the OSU team would stay on. The Vice Minister said he was surprised by this move. He had known nothing about it. Moreover, he had been happy with the way Amir was handling things. Not an auspicious start, I thought. Seckler's mouth dropped as much as to say, "What do we have here?" Lukomski took it all in stride. Did Lukomski figure that since AID was the one with the money, it could do whatever it liked? At the Vice Minister's side was Luft Al Ansi, who kept quiet during the entire meeting. Luft, a lean, handsome young man, was to become my contact at the Ministry.

On the way out of the meeting, Lukomski whispered to us that AID had been unhappy about the way Amir kept track of expenditures. He felt sure that the forthcoming audit by the Govt Accounting Office was going to have large dis-allowances. That would make AID/Sana'a look bad; and require CID to cover the loss. Not wanting to let this news spread could have been the reason that AID/Sana'a had been quiet about this move. Or, it could have been Mission incompetence.

After the meeting we accompanied Amir to the Core office, located "up the hill" from the city center. Core personnel occupied the whole second floor of the two-story building. About ten offices had exterior views; an accounting pool and a mail and duplicating room were in the center. The receptionist nodded to us as our contingent arrived at the top of the stairs. Her eyes looked as though she were smiling, but I wasn't sure. Her head and face were totally covered with black cloth, except for the opening for her eyes. Amir showed us around then called a meeting with his staffs. He informed them of the changes to be made then introduced me as the new team leader. So, I told them a little about my experience, my dedication to economic development, and that I

looked forward to getting to know them. The response was polite, but muted. Later, Amir drew Kellogg off to the side saying that he was *really ticked off* about being dumped as chief of party.

That evening the four of us were waiting to be seated in the Sheraton downstairs dining room when a contingent of 20 Yemenis strode past us. Five of them were in civilian dress; the rest were in uniform carrying sub-machine guns. The concierge led them past us to a private room off to the side, closed the door, and returned to seat us. We looked at each other and I thought *this is a different place*. Needing a lift from the day's events, Seckler hesitantly asked the waiter if we could order a beer. When he said "No, we do not serve beer," we were not surprised. After all, Yemen is a Muslim country. But then he said, "But we do have Scotch and gin," which *did surprise us*. So, before dinner we had cocktails in the lounge just off the main lobby. On one of our nights in Sana'a Vic Amens, a private contractor, and his wife invited us to their apartment for dinner. Another night Ray Renfro and his wife did the same. Both told us about life in Sana'a and what it was like working here. Despite their favorable comments, neither intended to extend their contracts.

We stayed in Sana'a for six days. On the seventh day, the others went back to the States and I returned to Colombo. I checked back into the Oberoi. By now, Christmas was just around the corner and the hotel's management had decked out the place with images of Christmas. On the weekend I saw a crowd of children with their parents gathered on the green expanse outside my window. Before long, Santa came around the corner with a sack over his shoulder. He handed out small presents to the squealing children. The weather was warm but the festivities made it seem like Christmas.

During my ten days there, I plugged away on the Minneriya report. When finished I gave it to Larry for his review. He told me that one report was enough. I didn't have to finish Kaudulla.

"Just leave the data for it and I'll finish it up," he said. But I said it would be far easier for me to complete it, since I had already set up the data according to the format and the wording would look much like that of the Minneriya report. I promised to get right to it as soon as I returned home and would send it to him by international courier. Our wrap-up meeting with the Ministry went well enough.. My time in Colombo had been worthwhile.

Having worked long hours, as I usually do at the tail end of an assignment, I was bushed as Larry drove me to the airport. Without thinking I had my diskettes on me when I passed through the screener. Suddenly, I chilled. Had the x-rays would scramble the data on my disks? I called Larry and got him to send a driver with duplicate disks. Fortunately, my flight had been delayed so there was enough time Eventually, I was on my way home. I spent a short overnight in Bangkok, then was on my way over the Pacific. At this time of the year our plane had lots of empty seats. Being in business class with no one on either side of me I was spread out my notes and began working on the Minneriya report. I made a quick connection in LA and was home by 6:00 p.m. I needn't have worried. The diskettes had not been damaged.

But the story does not end yet. The day after my return I went to the WMS office to check out a laptop so that I could finish the Kaudulla report quickly as promised. But this was "dead time" at the University. No one was there. I checked elsewhere and still could not find a laptop. Finally, I located a rental in Loveland. Meanwhile, Becky and David, the newly weds, arrived for our planned skiing trip at Winter Park. So, while they and Vicky skied, I stayed in our cabin working on the report. On the fourth and last day of our stay I skied with them in the afternoon, thinking it was ridiculous not to spend at least some time with them on the slopes. After New Year's Day when work was back to normal, I gave Dan Lattimore my expense account and my completed report to be mailed to Larry. Without even looking at the report, Dan spotted my charge for the laptop and said he couldn't authorize it, since he hadn't approved it beforehand. I was

flabbergasted. Here I had worked on Christmas Eve and during the ski trip. I had produced more than was expected of me. And what do I get? A \$75 disallowance. Disgusted, I said, "Just forget it. I'll, cover the cost myself." And he accepted! Then, I thought I don't work for him. I work for myself.

I had thought my Sri Lankan reports would provide the basis for a refereed journal article. Rather than writing an article on *methodology*, as I had in the past, here was my chance to write using *actual* data. I would be able to provide insight about how Sri Lankan farmers irrigate. I even spiced up the report with statistical calculations. I thought I had a winner. First, I sent the draft to The Journal of Development Studies. Rejection. Next I sent it to Agricultural Systems. Rejected again. Finally, World Development showed interest, but the editor wanted dozens of changes. "Do this, and send it back." But by this time I was enmeshed in Yemen and never followed up.

Meanwhile my January 1987 assignment at Ibb, which had originated with a phone call, was taking form. Bergsma had wanted to know if I would I be willing to do a secondary education study in Yemen. Its purpose was to review the performance of three secondary agricultural institutes (SAIs) and recommend what the Government needs to do next. I thought, "Why me?" I had never studied secondary education, nor did I have any expertise on the subject. "Never mind," was Bergsma's response. "You know economic development and I will be there to help you with the technical details. Also, Warren Noland, a member of NMSU faculty and chief-of-party will be able help you." So, "Why not," I thought, "Let me check with Vicky." Besides, I thought that this assignment would give us a good chance to see what we were getting into if my long-term assignment in Yemen materializes. Vicky agreed. So, off we went.

I still had frequent flyer credits. So Vicky arranged for yet another first-class flight to Cairo where we overnighted, then continued on to Yemen on board Yemenia Air. The sky was clear as we approached Sana'a, which is over 7,000'. Far below we could see several dust devils swirling about, while a thousand feet above us we saw colorful plastic bags caught in an updraft. Derisively, the locals called them "the national bird." Warren and his wife, Wanda, were at the airport to meet us. Riding into Sana'a we passed orderly neighborhoods with curbs, trees planted by the sidewalks, and many two-story, stone buildings with semicircle sections of tinted red, blue, and green glass above the entryways, which is a feature unique to Yemen. Warren drove us to the Sheraton, where I had stayed earlier.

The next morning, Warren made the expected introductions to Jaradah, the Deputy Minister for Education, and Mohamed Al-Harazi who would be my counterpart. Right off, I judged Al-Harazi to be a "character," which proved correct. He was relaxed, anxious to help, and spoke fluent English, having received an master's degree in the States. But, I found it difficult to carry on a conversation with him. I kept losing his attention; and when he talked he would flip from one topic to another with little rhyme or reason. But his congeniality and loyalty made up for this quirk of his. Our last visit of the day was at AID headquarters where we met Carl Schwartz, the Education Officer, as well as Lukomski, Swanson, and Renfro . That evening Bergsma came over to the Sheraton where we talked well into the night about my assignment and how he could help me when needed.

While Warren, Harold, and I continued our meetings, Wanda helped Vicky buy some of the provisions we would need for the next couple of weeks. We had been told that we would be living in a small trailer located at the Institute, which meant fixing our own meals. No problem there. In fact, we favored such an arrangement. Finally, we headed south for the three-and- a- half-hour drive to the small, rural town of Ibb. The first part of the trip was rather dull: the high plateau we

crossed was sparsely populated flat land and the road straight and lightly traveled. Off in the distance we saw an occasional house, sometimes sitting alone on top of a rock outcrop. Were it not for the borders painted white, it could have been difficult to realize a house was there, since it blended in so well with the rocks around it. Once, we saw a farmer plowing a field using a single horse-drawn blade and an unveiled woman walking behind him dropping seed into the furrow. The further we traveled south the fewer veils we saw. For the few days we had been in Sana'a I had walked past veiled women in the streets without thinking much about it. But now that we were beginning to see more unveiled women I realized just how different it is to be in a place where veils prevail.

After about an hour we entered rugged mountainous territory. The tightly winding road often had shear drops to one side with only flimsy guardrails. Stopping off at a lookout point we suddenly noticed a wide swath of missing guardrails. Someone had gone over the edge to a certain death. Made us shiver and hoped our driver had taken note. As we drew close to Ibb, the "badlands" we had been passing through gradually changed into rounded hillsides with small plots of farmland interspersed. By the time we reached Ibb the hills opened up to a pleasant valley surrounded by crop land and vineyards. We were told that the vineyards were for the fruit, not for the wine. Reportedly the Governorate of Ibb has an average annual rainfall of 40," which makes it the wettest spot on the Arabian Peninsula.

Before going to the Institute, Warren suggested we stop at a local shop to let Vicky buy canned goods, flour and, rice, items she didn't buy in Sana'a. On the shelves we saw various cans and cartons with the AID symbol of two hands above a label reading, USAID, Not for Resale. But here it was being offered in plain sight. The Yemenis were like that—independent tribesmen, unresponsive to rules imposed by others. Only after the 1962 overthrow of the Imam did Yemen enter the modern world. Most Yemenis were farmers and the percentage of literate women was in

the teens. Knowing little about Yemen before we left home, Vicky and I looked forward to an interesting time. We had expected to see sand dunes, not the fertile farmland surrounding us.

Finished shopping, we rode through town and to the Institute. Its grounds extended over several acres of grassed areas amidst tall trees. A idyllic place I thought, especially with the refreshing climate that comes with living near the equator at 7,000 feet. We drove to one of six widely spaced house trailers where we would live for the next six weeks. After unloading our bags, we rode around the school grounds: six two-story buildings that housed the classrooms, library, workshops, administrative office, and the "barracks" where the students lived. Warren then introduced Vicky and me to Ali Kassim, the school's superintendent. He was a trim, good looking man in his thirties. He welcomed us, saying he looked forward to the study and I would help when needed. Ali had earned a master's in the States, which explained his command of English and his ease in dealing with us.

Compared with most of my international assignments, this one was almost pedestrian. No great challenges technically; it was mainly understanding the situation, analyzing what we find, deciding on recommendations, and writing a report. I waded through background reports, such as AID's project paper, the country's development strategy, the World Bank's sector studies on Education and Agriculture, and a few consultant reports. While in Sana'a Harold and I had visited the Ministry of Education, the Veterinarian Training Institute, and several graduates from Ibb. In Dhamar, south of Sana'a, we talked with British staff at the Central Uplands Rural Development project and the Dutch staff about their Range and Livestock project. That accomplished, I was ready to begin the long trip that Harold had planned for us that would take us from the southern tip of Yemen to its northern most tip.

Our driver Ali Abdullah proved to be a skillful driver, good mechanic, and a good translator. In excellent English he eventually told Vicky and me that he had an Ethiopian mother and a Yemeni father. The highlands of Yemen around Sana'a and those around Asmara are about the same in terms of elevation, latitude, landscape. The short distance across the Red Sea favored the close relationships that had developed between these two regions. Ali said that he returns to visit his mom on a regular basis, but preferred we keep this secret.

The first leg of our trip was south to Ta'iz. On the outskirts of the city, the country's second largest at the time,³ we saw textile mills and other evidence of a commercial and industrial activity. Abdullah located the Agricultural Research Institute for us where Harold and I met with a couple of scientists. After talking with them, visiting their facilities, and several cups of tea, we departed to check into a hotel located in the middle of the city. The hotel was small, well run, and clean. Our expansive second-story room, though, was strange. It had a large curtainless window. Although the view from across the street did not allow someone to look directly into our room, still it was a bother and the lights from the street lamps kept our room lit throughout the night. Walking around we found this hilly city attractive, its cobblestone streets and the small shops looked more like a European city. Not a all like the sprawling and dusty frontier-like Sana'a.

The next morning we drove to the coast. Ali told us about the smuggling of liquor into Yemen. Traffickers would cross the relatively short distance of the Red Sea under the cover of night. Once on land they would bury their stash in the sand at some designated location on the beach. The practice was broadly known, but the timing and location were not. Perhaps, the Yemenis were in on it because liquor was widely available. By mid-morning we were well up the coast. According to plan, we stopped in Zabid to visit the Women's extension training center.

³ In 1987 the country was called the Yemen Arabic Republic to distinguish it from the People's Democratic Republic of Yemen to the south. Since then, the two countries overcame their differences and united so that Aden became the country's second largest city.

After a single enquiry Abdullah found its location, for the Center was well known in the community. Once there, Abdullah introduced us to the Center's female administrator, unveiled by the way. She received us inquiringly yet graciously. She explained that the Center's purpose was to train secondary students to be extension agents. Once trained the agents would go into the villages and advise women on home economics and health issues. She said that the village women welcomed them but that these young agents were hampered by not being able to travel far, since they had to return to their homes each evening. Then she asked if we would like to visit with the students, who were now in-class. When we said yes she asked us to wait a few minutes to give the girls time to get properly dressed, which meant covering themselves from head to toe including the ubiquitous veil. Walking into a large classroom we saw about forty students sitting upright behind their desks. We thought they might be smiling because of the sparkle in their eyes, but we couldn't tell for sure.

After awhile, Harold, Abdullah, and I departed leaving Vicky to stay on. We waited and waited. It turned out that the young ladies were *thrilled* with the handwork Vicky had brought with her as a way to while away the time. After joining us, Vicky said the "girls" took off their veils and crowed around her pleading with her to show them how to knit, embroidery, and cross-stitch. As she left Vicky told them that she would buy colored thread and yarn that she would send to them once she returned to Yemen. Vicky had been a hit; and in the process she probably learned more about the secondary education of women than neither Harold nor I could possibly have learned.

Back on the road we drove north to the rather unattractive port city of Al-Hudaydah. Not large by most standards, still it was the major port serving Sana'a. After cruising around the city for awhile Abdullah drove north beyond he city limits so that see what the beach had to offer. We found the water murky, the sand dusty, and the area littered with trash. Not a place to come for a weekend. Back in town Abdullah located the only "tourist" hotel, except that it was anything but

touristy. The entranceway to this wooden structure had a few chairs occupied by what we surmised were businessmen. The reception desk was up a flight of stairs in a dimly lit enlarged hallway. The male receptionist asked if we had reservations. When we said no he suggested we wait. "There might be some cancellations." After awhile he told us two rooms were available. With that settled, Abdullah left. In all these travels, our drivers would fend for themselves not wanting to spend their limited per diem on the places where we stayed and ate. Our room was reasonably clean and our bed comfortable enough. The air conditioner labored to keep the room cool, making a loud, churning noise in the attempt. Around midnight management threw the switch and we had neither light nor air conditioning for the rest of the night. Even so, we were glad to have a place to sleep.

The next day Abdullah drove us a few miles north of town searching for landmarks.

Unbeknownst to me Harold had planned a visit to the Surdud Agricultural Institute. The school was isolated with no road leading directly to it. The only way there was to follow a shallow riverbed. Finding what he was looking for, Abdullah eased off the highway then drove up the middle of a wadi. It was slow going because of the potholes, boulders, and debris. At times we left the stream because of its narrowness or some obstruction then followed what was only a path until the streambed was passable again. Sometimes, when we saw a farm along the way, Abdullah would find a path to the homestead. Following the path we saw small plots of ground ready for planting. Interspersed were fruit trees about to bloom. Abdullah would explain to the farmer that we were going to the Surdud school and wanted to know if we were on the right track. Being assured that we were, we continued on our way. After a couple of hours we finally reached the place. Although the Principal didn't know we were coming, he graciously welcomed us. He showed us the few classrooms and shops making up the school, the students' quarters, and what we guessed served as a recreational area. The tour didn't take long. Then we sat down and listened as he described the curriculum, his teaching staff, the students, and the books and their training

equipment. We promised we would mention his needs in our report. After that, he told us how we could return to Al-Hudaydah more directly via the main highway between Sana'a and Al-Hudaydah. On the way back we marveled over the dedication of both the teachers and the students who live in such a remote area. But then living remotely in Yemen is not uncommon.

The following day we visited the Tihama Development Authority on the outskirts of Al-Hudaydah, whose area of responsibility covered the narrow strip of land along Yemen's entire coast. Ali Kassim, who was there to meet us, introduced us to those concerned with ag education. He helped us select a few reports and said he would translate their summaries and conclusions and send them to us. After we figured we had stayed long enough, we gave our thanks, and headed up the winding, tortuous road to Sana'a. The Chinese had helped fund the road's construction by providing equipment and operators, labor, and supervision. We climbed literally straight up the escarpment. It was not a comfortable trip because of the many sharp curves, the precipitous drops, and the aggressive truck drivers who held to the center of the road. But by now Abdullah had demonstrated his driving abilities. So, we felt as reasonably safe.

Once back in Sana'a, we checked into the Hadda Hotel, which used to be a Ramada. After cleaning up and eating, Vicky and I returned to our room. We had not gone to bed yet when we heard a banging on our door. It was Harold urgently saying he wanted to talk with us. Once he was inside, we could see that he was badly shaken. He burst out, "Russian spies are in the room next to me!" Explaining, he said that the wall to the adjoining room was so thin that he could hear them say clearly, "Bergsma. Ameriki.." Then they mentioned the many countries listed in his passport. (We were required to leave our passports at the desk as we checked in.) Herold figured the desk clerk had allowed them to look at his passport. He said that all three us were in danger. Vicky and I tried to assure him that what he heard probably meant nothing. That they might have overheard us talking when we were in the lobby. But that didn't explain how they knew his name

or the places he had been. After he left, Vicky and I found it surprising that Harold had been so upset. After all, hadn't he grown up overseas with a missionary family and had worked for years in remote Nigeria? Yet, Vicky and I didn't feel threatened, possibly because the "spies" hadn't mentioned our names. The next day, Harold read out the clerk saying he was going to report what had happened to the U.S. Embassy suggesting that no Americans should stay in the hotel again.

We were not finished with our field trip yet. The next day we headed straight north to the ancient, fortified city of Sa'dah, close to the Saudi border. Driving was easy for the road was well-paved, the traffic light, and the terrain was flat. We passed miles upon miles of volcanic rock resting on the surface. Entering Sa'dah we drove past small, mud-plastered, one-story buildings with flat roofs supported by log beams protruding from the walls. Reminded me of the adobe huts one sees in Southwestern USA. The city center, if one can call it that, was surrounded by a ten-foot, mud-plastered wall, which explains the reference to the city having been fortified. Asking directions, Abdullah drove us to the only tourist hotel in town. This two-story building looked reasonably well cared for. Outside the simple entryway stood a young Hasidic Jew wanting to sell us trinkets. After we declined, he turned to the Arab youth around him and continued talking. We were surprised to learn that the Jews and Arabs in this part of Yemen have gotten along peacefully for years. The reception room was light and airy with a couple of wood-framed chairs and a couch. Sitting at each end of the couch were two young men in civilian garb with AK-47s propped up beside them. By now we were beginning to get used to seeing this show of force. After all, Yemeni men when dressed in their traditional robes, which they often do, will have a jambia, a short, curved dagger, tucked behind the center of their belt. The story goes that the wearer does not take the dagger out of its holster unless he intends to use it. But when it is taken out for some peaceful reason, custom requires that the wearer at least draw blood. For that he would lightly prick one of his fingers.

In the afternoon we visited the Governor's "mansion," which was little more than a large two-story farm building surrounded by a wall and guarded by sentries. Visiting the Governor was a mandatory show of courtesy. He, as do others, feel he has a right to know what's going on within his jurisdiction. He welcomed us and ordered tea. After the formalities, we explained the nature of our trip. He in turn suggested persons we ought to meet saying he would tell them to expect us. I hesitate to think what might have happened had we *barged* into this northern outpost without first gaining his permission. That done, Harold wanted to visit the market inside the walled city. Humoring him, Vicky and I went along. That evening, we sought out a place to eat, since the hotel did not serve evening meals. By this time the sun had set and darkness was setting in. We strolled down the wide, unpaved, and dimly-lit main street searching for the place the hotel clerk had recommended. As far as we could tell, there was no alternative. Screwing up our courage, we entered the place. Abdullah came with us to translate. The waiter whom we could barely see because of the dim light and smoke told us what was available. We settled on shish kabob with rice as probably the safest choice. Once our food arrived, we found we didn't really know what we were eating other than the rice. Instead of beef, pork, or chicken, maybe even goat, I think we got liver. That squelched my appetite. We paid the bill and made our exit. "We'll be lucky if we get out of town without having dysentery, or something worse," we thought.

The next morning we visited the secondary school, a couple of farmers, a rancher, and staff at the FAO and World Bank offices. Then, we headed back to Sana'a as I wondered why Harold had wanted to come here, although our trip did give us a look at another part of the country's agriculture and secondary education. More than likely he might simply have wanted to see this area. In Sana'a the next day we met with the representative of the Yemeni Women's Association. I could make good use of what she said in my section on Women. We also talked with Harold Matteson, who was Noland's on-campus backstop. He was in-country to check on things firsthand, as was his practice. We heard the story about how his driver having dozed off on one of the narrow

switchbacks on the way to Ibb and drove their vehicle off the side of the road. Fortunately, it rolled during a tight, tree-lined switch back that cushioned the fall. Harold and his driver came out unscathed. Bergsma and I surmised that Harold had arrived in Sana'a late at night and wanted to reach Ibb without delay, regardless. Matteson was like that, going full-bore most all the time.

Once we had returned to Ibb, I began writing in earnest putting in the long hours that I usually do. Part way along, I woke up in the middle of the night worried that I wasn't going to make the deadline for the draft's completion. That deadline was important because Sherper had already scheduled a large meeting in Sana'a for my presentation. Fears such as this are not unique: they hit me on just about every one of my overseas assignments. It's like an infection. But, I made it through the rest of the night, rose early, and began writing. Soon, the adrenalin kicked in and I was able to work long stretches late into the night. Having made good progress I took a break and reflected, "Here I am cooped up in the trailer day in and day out fighting against the deadline scarcely knowing what's going on around me. Yet, for others life goes on as normal, and I'm not part of it." But the audio tapes we had brought with us helped. The ones by Mama Cass and the Swedish group, Abbas remain clearly in my memory.

While secondary education was not my field, the fact that the SAIs taught technical aspects of agriculture, rather than general education, helped. I had learned quite a lot about agriculture over the last several years and my knowledge of economic development allowed me to show how technical education contributes to the country's development. Two weeks after the "midnight worry" I had completed a draft that suited me. Our team had learned that the graduates of the veterinary Institute in Sana'a had found a useful and satisfying slot as assistants to the country's veterinarians, while the graduates from the other two institutes were largely misplaced or felt dissatisfied. Half of the graduates wanted to continue their education at the University, yet their technical schooling had not prepared them for that. At the same time, few aspired to become

extension agents for which they had been trained, despite the need. And the private sector had found little use for them. Clearly, there was a mismatch, which led to our recommendations that the whole SAI program needed to be rethought—the first of my recommendations. My second recommendation was that the idea of another SAI to be located at Amran, north of Sana'a, should be abandoned. My recommendation concerned a Post-Secondary Agricultural Institute. It's objective would be to provide further practical training for SAI graduates on farm management, mechanics, and irrigation—

important subjects covered lightly or not at all by the SAIs. The intension would be to produce graduates who are more valuable to the community and more satisfied with their careers.

With copies of the draft in hand Warren, Harold, Vicky, and I traveled to Sana'a where I presented a summary of our report at a luncheon held at the Hadda. The Deputy Minister of Education, an AID contingent, and about 30 others attended. My report stirred little comment, but later the Deputy and Sherper said they were satisfied. Unlike most of my assignments, I was allowed to return to the States and finalize the report, which would include suggestions made at the end of my presentation. Al-Harazi, who was among the attendees came up to me afterwards with a huge smile on his face and presented me with a *kaffiyehs* (checkered head dress) as a remembrance of our time together. Nice!

That evening Vicky and I had dinner with Orville and Rosalie Heim. Orville was in Sana'a supervising a construction project for Stanley Engineers. Our connection? Vicky and I knew Orville when we were in La Salina. After Vicky and I left, we heard about Rosalie nursing Orville back to health after the terrible accident that had killed his buddy Hirsch.

The next morning Vicky and I headed home. On board our Yemenia flight were several veiled women dressed in *abayas*. No sooner had the seatbelt sign been turned off than they all got

up and walked to the rear of the plane. Before long they returned in high heels, tight-fitting dresses, and facial makeup. What a transformation and surprise! Vicky and I "over-nighted" at the Sheraton-Heliopolis, which is close to the Cairo airport. We had stayed there before. What stands out in my memory of the place was *how modern* it was. The lobby was large, a bar off to the side was crowded, and the guests were well groomed. Chic women passed by; looking as though they had just arrived from Paris: no veils, no *abayas*. We felt as though we had already reached Europe. The next evening we were back home.

At home over this period: Becky and David got married in 1986. Mike and Paul excelled in golf. Mike won the Fort Collins Country Club champion in 1982. The next year Paul beat Mike for the championship. Heading into the last few holes both were so far ahead of the closest competitors that it became a brother-against-brother match. Vicky watched for awhile, then became so nervous that she returned to the Club House to await the outcome. The next year, with Mike gone, Paul won for the second time. But they were not the only winners in the family. Vicky had won the Club championship in 1975 and a few years later she scored the third lowest score in the city-wide tournament. Where was I? Watching. In May, 1985 I made *full professor*. Guess all my hard work paid off.

7/24/17

Chapter 14: Yemen

Following our return from Yemen Vicky and I had several months at home where we reestablished contact with Dad and our friends, vacationed in California with Mike and Paul, and I tended to the theses and dissertations of my students. The academic year ended in mid-May and I was "on the beach." But I wasn't concerned because I expected to leave for Yemen before long. I met with Seckler, Spencer, and Jim Collom (a new guy with CID) to began planning for my return to Yemen as team leader. I didn't particularly take to Collom. He was short, fat, and self-assured perhaps ten years my junior. He reminded me of Bill Schwarz, which was no compliment. But things dragged on and on. Pressing Spencer and Collom seemed to do no good. Finally, on June 22, 1987 I told Collom that I had waited long enough, if CID didn't give me a commitment in two days, I was pulling out, to which Collom asked Spencer, "Why is Shaner so impatient?" Two days later I was on CID's payroll.

Now, Vicky and I could get ready to move. We cleaned up our house, signed a rental agreement, put our furniture and car in storage, and completed our medical exams. I had final face-to-face meetings with my graduate students then I flew to Corvallis to help smooth the transition from OSU to CSU. OSU's project manager had been Ron Minor, perhaps ten years older than I, who impressed me as having little experience or enthusiasm for international work. My second day there, he invited me to his home for dinner of *chicken gizzards*, a family favorite, he said. Because I couldn't imagine gizzards as the main course, I dreamed up some excuse for not going.

The day before Vicky and I left for Yemen I sat in on a CID Board of Trustees meeting in Ft Collins. What surprised me was the attention I got. The members were friendly and wanting

to talk. They made me feel as though my commitment to Yemen was something special, as though CID had found it difficult finding anyone willing to go there long-term.

We arrived in Sana'a late at night on Aug 12th. Amir was there to meet us. The drive to Sana'a took half an hour. From our vehicle's headlights we could see what looked like farms and small commercial buildings on either side of the road. Once inside the city guards armed with rifles stood in the middle of major intersections. After Amir showed them his papers we continued on. We noticed some of the ubiquitous doors with their half circles of red, blue, and green stained glass. Finally, we rode up a modest incline to the entrance of a large complex of apartment buildings surrounded by a high wall. An armed guard stepped out of the small enclosure where he had been posted, recognized Amir, and swung aside the heavy iron gate so that we could enter the Hadda complex, named after a wealthy Jordanian contractor. Amir pulled up to a square, three-story stone building, got out, unlocked the door, helped us unload our luggage onto the elevator, handed us our apartment keys, pushed the elevator button, and said, "Your apartment is on the third floor. There are only two apartments on each floor. Yours is B. You can't miss it. If you have any problems, my apartment is the next building over, first floor, apartment A." He reminded me that it was now Friday, the second day of the "weekend" then said he'd pick me up tomorrow morning at 8:30 for a meeting with Ken Sherper, the AID Director.

Yemen was a backward country while Vicky and I were there. It still is backward. During the first orientation session at the US Embassy, we learned that only in 1951 did the Imam establish diplomatic relations with the British and the USA. Before that, the country had remained isolated and governed by Sharía law. At that time there were no paved roads, no Yemeni doctors, only Qur'an schools, and no factories. But lots of diseases. Only in 1970 was the Yemen Arab Republic established. Tensions with the Marxist-leaning South Yemen existed till 1990, when the two countries merged in what is today the Republic of Yemen. As part of the Embassy's orientation for new arrivals, we learned that the life expectancy of the Yemenis was 48 years, adult literacy was 20 percent but only two percent for females, fourth-grade

completion was fifteen percent for males and ten percent for females, the population growth rate was three percent, the population approached seven million including those working overseas, the remissions from Gulf States had been 30 percent of the GNP, 85 percent of the population lived in rural areas contributing 40 percent of the country's output, and only 25 percent of the villages had safe drinking water.

CSU's proposal put together by Seckler in London stated that our approach would 1) focus on institution building while meeting the immediate needs of the Ministry of Agriculture and Fisheries, 2) include AID/Sana'a's preference for the current modular approach, and 3) maintain close working relations with other organizations and activities. Summing up, CSU's aim would assist the MAF so that it would not need to rely on foreign technical assistance much longer.

Concurrently with these institution-building efforts, CSU would concentrate on MAF's immediate needs. We will support Planning and Statistics, the Documents library, Water Management, and Training. CSU accepted the value of these modules, but might propose modifications as we gained experience. We estimate spending to be on the order of 4.3 million dollars a year

The Hadda complex was a walled off area of several acres. Most of the 20 square buildings contained six large apartments for families and smaller apartments for bachelors. Besides the apartments was a lending library, an auditorium, a repair garage, two tennis courts, a volleyball court, and an empty swimming pool. There was no grass or shrubbery, only a few scrawny trees scattered about. Next to the complex was a small grocery store whose main attribute was its convenience. It sold plagiarize items such as Marz bars and Milky Daze and late-arriving magazines, such as Time. On the cover of one of the issues was the frontal shot of a female broad jumper, with her body blacked out from waist down. Close by on the main road

was a Korean restaurant that served kimchi and other traditional dishes. A hundred yards up the hill was the Hadda Hotel where we and Bergsma had stayed. Further up the winding road, past apricot trees and vineyards that grow table grapes, was the Tourist Restaurant. This place, run by a Yemeni who had worked for General Motors in Detroit, was little more than basic. Even though the interior was dark the place looked like it needed a good cleaning. Still, going there qualified as "a night out" because of the good food and friendly owner. He liked to talk about drawing his monthly social security check from the States In time, I grew used to the muezzin's soothing call each morning while Vicky and I learned to accept the presence of the PLO training center two miles down the road. That was our neighborhood. It's where Vicky and I expected to spend the next two years, may more.

Our apartment was larger than we needed, but as Team Leader, it came with the territory. The kitchen was basic and good enough, the living room and dining rooms were large, we had three bedrooms, one for us to sleep in, another for my office, and the third one for the TV and tape deck player. The furniture consisted of basic hardwood-framed easy chairs and couch, an attractive dining table that could seat eight, a large china cabinet, end tables, and lamps. Especially after the occasional dust storms, dust would find its way through the cracks in the window frames and under the door to lay a fine layer on everything. Vicky was to find maid who came once a week to clean and iron. She was a Christian from Eritrea who said she would like to return there. Across the hall was Royal Brooks and his wife from USU. I first met him when he was CSU's chief of party in Egypt. Immediately below us were Roy and Joyce Lockhard from the Univ of Kentucky in Lexington. Roy worked on a CID project that focused on fruit production. When I told them about Ken being my cousin, they said they knew both Ken and Mary Sue. Small world again.

When Saturday arrived, I waited outside of our apartment complex for Amir to show up.

After an hour, which was past my appointment time at AID, I called his office. "Oh," he said, "I

forgot." Was this an oversight or did it portend things to come? At AID I met Sherper, Lukomski, Swanson, the chief ag officer who was to be my principal contact, and John Rifenbark, assistant to Swanson. Sherper explained that the reason for the delay in bringing me to Sana'a was that all parties needing to agree on the change to CSU. He also informed me that I would be to attend his monthly meetings of team leaders where he kept team leaders appraised of current events as well as any changes to rules and regulations.

John showed me around the AID complex, which was on the outskirts of the city—a complex of one story wooden buildings set within a dusty compound. Quite unlike AID's "fortress" in Islamabad. This was the same Sherper whom I had met in Addis and the wrap up meeting on Ibb. In time I would find Swanson to be a laid back and friendly guy who was not particularly effective in his job. Rifenbark carried out John's orders in a straightforward manner without a rapport developing between us. With the formalities out of the way, an AID driver took me across town to the CID offices on al-Zubari Street where I had been before.

Right off, I decided that Amir should remain in the office he held as team leader.

Although that office offered the best view of any in the building I decided no to "pull rank."

The other office was identical, except that one of the views was our parking lot rather than the view of downtown. However, in the days to come, visitors thought Amir was still in charge, but that didn't concern me.

The team I inherited proved to be a mixed bag. Amir, relieved of his leadership role, would work closely with MAF's DG for Agricultural Affairs. He would also fill in as team leader whenever I was absent for any length of time, which Vicky thought was a mistake. Dave Faulkenberry, the senior statistician in charge of the Planning and Statistics module, was a disappointment. He was a good looking guy, about my age, who I was told played a good game of tennis. Being Core's statistician I looked forward to learning a lot from him, but that never

happened. When I asked for his help in designing two farmer surveys that were part of our Work Plan, he resisted. Only, when the Yemeni DG responsible for these surveys complained about Dave not being available did he agree help out. The few times, I had asked him to fill in as team leader he refused. Was his reticence to help me the result of CSU's ouster of OSU? I never found out. Audrey Dibble, the senior librarian in charge of the Document Resource Center gave me the most grief, although our relationship started out well enough. When I asked for her input to the Work Plan, she gave me a neat, well presented list of things the Center needed, including an Arabic cataloger. In the writeup she said that I should find a replacement for her because her contract ended in nine months. When it came to write the work plan I accepted her at her word, which was a mistake. Eventually she really wanted to stay as did those at the Ministry. I guess she wanted to be coaxed. Once I realized this, I told her I would arrange for an extension of her contract. I also arranged to hire Ahmed Taleb, an Arabic cataloger from Lebanon. After that it was just one thing after another. Mutahhar al-Huthi, a young Yemeni, was the fourth member of the OSU team who stayed on. The first weekend after Vicky and I had arrived Mutahhar came to our apartment. Inviting him in we listened to him give us the "lowdown" on the project. Over the next several months he dutifully divided his time between the Ministry, Core's main office, and the Yemeni-American Language Institute where he had responsibilities. Then, he began slacking off. His hours at the Core office became irregular, as did his time at the Ministry.

These four were the ones OSU had left in place. CID's decision to replace OSU with CSU, which was accepted by AID without the consent of the MAF, looked good in the abstract. But it never worked out. None of the these four *really* accepted my leadership since they were well ensconced at the Ministry. As a result, my influence over them was minimal.

I spent the first two weeks settling in, talking with Lutf al-Anzi, who was Assistant Deputy Minister and my contact at the Ministry, getting acquainted with Core staff and their programs, learning what Swanson and others at AID expected of me, reading reports, and helping Vicky adjust to our new, *and different*, life in Sana'a. Then, John Swanson off-handily told me about the Annual meeting¹ scheduled in seven weeks which require that I present Core's Work Plan for the next 18 months along with its budget, adding that "It's all yours!" But then he reassured me saying, "It was straight forward." Almost immediately, I began by holding meetings with Amir, Dave, Audrey, and Mutahhar asking them to give me inputs for each of their modules with which they complied.

Not so when I asked the same of Lutf. He showed little interest, which surprised me because he was responsible for Planning at MAF. I would learn all too soon that setting objectives, identifying programs, specifying activities, and preparing budgets was not the way MAF operated. Lutf was handsome, slender, and tall for a Yemeni. He could be charming, when he felt like it. One time during Ramadan he showed up at the Ministry bearded in a shepherd's robe and wearing sandals. He said he had been spending time in the wilds, as though he had just emerged from biblical times.

With a month to go, I had the Work Plan in pretty good shape ready for review by Lutf, Swanson, and our guys. With little comment from them, I began working on the budget. All had given me the amounts in Yemeni rials. Since I had plenty of experience putting budgets together, I thought I was in good shape for meeting the deadline. Then, Lukomski reared his ugly head! Once in his office he showed me the new format for our budget that AID/Sana'a was in the *process of developing* for themselves and for AID's contractors. Our meeting went on for three hours. I argued and argued, even pleaded, to let me present our budget in a form that I was used to. I said that his "matrix" asked for too much detail, more than he would ever need. I said that I knew how to use the Lotus spreadsheets and that he was unaware of what he was

¹ This was the Annual meeting in which MAF, CSU, AID, and CID sign off on the Work Plan and the supporting budget.

asking me to do. But he would not give in. He admitted that, although he had little experience with spreadsheets, he was in the process of finding someone to do the job for him. Besides, he said, this is the new directive out of AID/Wash.

Saddled with Lukomski's demands, I asked Amir to be in charge while I sequestered myself in our apartment working there for three straight weeks. The problem was the excessive detail, which I had anticipated. I had to estimate expenditures for each of the budget's six quarters, in dollars and Yemeni rials, for each of the six modules (the five in our proposal plus the one for me as team leader), by each position (team leader, campus backstop, statistician, secretary, and part-time help) and for each expenditure (base pay, fringe benefits, domestic and international travel, per diem, post allowances, and materials). Gathering this information was a big task and so was its presentation. Being under the gun to finish on time, I began rising early and working late. As the date for the annual meeting grew near I became more and more fearful about not finishing in time. With just two days until the meeting, I put on a last-ditch effort by working day and night for two straight day and until four a.m. of the third morning. I napped for two hours, got up, showered, ate breakfast, scribbled some notes for the presentation I to the MAF staff. I arrived at the Ministry just in time for the 9:00 a.m. meeting. The matrix came to 144 pages! Earlier, I had asked Swanson if I could skip this meeting so as to finalize the budget, which was needed for the signing ceremony that evening. I was just that close. "No," he said, "Just show up."

Attendance at the evening meeting at the Sheraton was larger than I had expected: about 40 from MAF, several from AID, and our contingent of Kellogg, Collom, Spencer, and Minor). Numerous speakers preceded me, which was good because it gave me a chance to fix in my mind what I was going to say. To my surprise, my delivery came off well enough, given that I was "running on fumes."

Apparently, many of the MAF staff appeared anxious about what I had to say, since I hadn't met many of them and what I would say affected the funds they would receive from AID. They even understood my comment about "kicking the dog," which Zandstra had used at our FSR Workshop. The concept goes like this: Sometimes one can study and study a situation without knowing what to do. I was referring to my uncertainty about dealing with MAF. Not until one "kicks the dog" does one find out if the dog is friendly, fearful, or dangerous. So in my case, I decided to propose a program to see how the Ministry would react. With the Annual meeting occurring so soon after my arrival, I had no other choice than to "kick the dog." How did I work so many hours at a stretch? I felt I had little choice if I was to be ready for the meeting. Tapes of disco music helped; and then there's something about working with computers that keeps one going, just as at Stanford when the lights to the Computer Center burned night and day.

This gala affair took place in the Sky Room of the Sheraton. As I entered Sherper was there to greet me, then he expressed disappointment that I had not finalized the budget. (I should have told him that I had completed a budget weeks ago, but that Lukomski's matrix had been so complex that I hadn't been able to finish. But, I didn't.) Once inside, Swanson told me not to worry, there would be time enough for that. Most important was the total amount, which I did have. Bulbs flashed and TV cameras rolled during the signing ceremony. This was a national event. Then, the bar opened and the scotch flowed. Seckler and our gang had learned that hard liquor was available at the hotel. We had thought that their religion forbade the Yemenis from drinking. But, we were wrong!

With the Work Plan signed, it suddenly dawned on me that all the effort we had put into developing Seckler's strategy for Core-II was for naught. Not once did Sherper, Lukomski, or anyone else ever refer to it. I had even forgotten about it myself. The time given me for preparing the Work Plan with the supporting *matrix* was so short that all I could do was to ask

Amir, Dave, Audrey, and Mutahhar to give me their work plans. These were just a continuation of what they had already been doing. So, why didn't I get someone to help me with the budget? As team leader I had that prerogative. In my defense, I felt so pressured for time that I thought it would be easier to just dig in and do it myself. Besides, only Faulkenberry would have had the ability to work with me on the matrix. But he had refused to help me in other ways, so I doubt that he would have been a loyal sidekick. What galled me most, *not once* after we began implementing the Work Plan did Lukomski *ever ask for details about our expenditure levels*.

That evening after all this activity I crashed. A few days later I met with Sherper and Swanson, who said they were satisfied with the meetings.

Kellogg, Collom, Spencer, and Minor stayed around for a few days. During that time Collom did what he could to establish himself as CID's legitimate manager of our project. He had long sessions with Sherper and Swanson and talked at length with the local group that teaches English as a foreign language. After these four left, I was able to concentrate on putting the final touches on the Work Plan and budget so that they could get distributed to the Ministry and AID. Then, I turned to the next order of business, which was to fill the long-term positions of computer specialist and agricultural economist.

Prior coming to Yemen I had met with Spencer and Meiman about on-campus procedures for selecting candidates for assignment to Yemen. The two of them, along with Collom, would send out a notice to CID universities announcing available positions; they would screen the applications, check the references of the top three, assuming they could find that many willing to work in Yemen. Knowledge of Arabic and experience in Muslim countries would, of course, be an advantage. They would interview the candidates by phone or in person, rank the top three, send me the candidates' credentials, and their recommendations. Their top choice for the computer specialist was Marty Jannsen from NMSU, who Bergsma had recommended highly.

Their second choice was Ahmed Hoffman currently working in Egypt. Their third was Ali Ramman, an Iranian with a Russian wife, who was in the States with a green card.

In my naivete I showed Lutf the committee's recommendations. Lutf would have none of it! He wanted someone who spoke Arabic. But I argued that much of what we figured Jannsen would do did not require Arabic, and for those situations where Arabic was important we'd find someone locally with computing knowledge to work with him. The more I argued, the more resistant Lutf became, implying I had a hidden agenda.

This went on for a few days until I gave up on Jannsen and turned to Hoffman, whom we felt superior to Ali. In fact, the committee rated Ali as being only marginally qualified. Lutf gave me a sideways glance again revealing his suspicions. Eventually, it came out that he thought that we were attempting to bring in a Jew. The name Hoffman was the problem. But, I said, he is currently working for the Egyptian Government and his father was the former Jordanian Ambassador to Egypt. How could he be Jewish? If he liked we would run a check on that possibility. Lutf didn't buy that either. So, we ended up with Rammal, and the many problems he would cause.

Reflecting on this, I came to realize how important understanding Muslim cultures must be. Sure, I had worked in Egypt and Pakistan and with two at the Tech Agency in Ethiopia; and I've advised Muslim students at CSU. However, a high percentage of these had been trained abroad in English-speaking countries, so that Arabic did not matter nearly as much as it did here. Dealing with them in Yemen called for more diplomacy. First, Lutf wanted to select from among qualified candidates *himself*. Having someone else make the decision for him was demeaning. Second, he was loathe to hire anyone with even the slightest possibility of being Jewish. He readily gave up competence for cultural affinity. The possibility that Lutf would

react this way never entered my mind, nor to anyone in CID or CSU. We were just not attuned to dealing with a Muslim culture like that in Yemen.

In time I came across the following written by a sociologist who had been on assignment in Yemen: he Yemeni man does not trust his brother, but he trusts his brother more than someone from his own tribe, but he trusts his tribesman more than those from another tribe, but he trusts these tribesmen more than those who come from the city, but he trusts those from the city more than those from other Arabic countries, but he trusts these more than Europeans, but he trusts these more than Americans, whom he trusts least of all!

Perhaps nothing thwarted my acceptance by the Ministry more than the issue over where I spent my time. I had two offices; one at Zubari and the other just up the hall from Lutf's office. While I tried to check in with Lutf several times a week and meet with others at the MAF, I spent the bulk of my time at Zubari, except when I retreated to our apartment when pressed for time. My reason was simple. The paper load that AID imposed on me meant that I was under constant pressure to allocate my time as efficiently as possible. I *never* seemed to have time to spare. Lutf and others at the Ministry wanted me there so that we could get got to know each other and where I could be reached at a moment's notice. I doubt that they had any idea of the workload AID had imposed on me. As nearly as I could tell Amir had spent much of his time at the Ministry. Why couldn't I? But we now know that Amir got into serious trouble with AID; and he didn't have the *matrix* to deal with. In short, AID didn't understand the Ministry and the Ministry didn't understand AID. Nothing I said about the demands on my time seemed to have any effect. I opted to follow the advice of one of the auditors from GAO, who said, "Be sure to follow AID's directives." Feeling that I had little choice and I chose to work where I was most efficient. That was at the Zuberi office. It wasn't as though I didn't like working closely with my counterparts. I had done so in Ethiopia, Peru, and elsewhere.

One time when I was well into my time in Sana'a I attended a major meeting in which Mukbil and Sherper were present. Together they agreed I should spend half my time at the Ministry. This was still an ongoing issue. Annoyed, I retorted, "Tell me what you want done, not how to do it!" This was a tactical error on my part, but I had lost my patience.

Over the months ahead, Lutf and I got to know each other better and there were times when we got along. I would try to check in with him every other day for an hour or so, if he had time. Often, he did not. When he was gone or occupied with someone, I would often wait awhile and if he still was not available, I would return to Zubari. Sometimes our meetings were constructive and I would leave satisfied. At other times it would be a harangue about my absences from the Ministry, why Core had fallen behind on the Work Plan's schedule, or some other pique of his. When this happened I walked away discouraged. But, by the time I returned to my office at Zubari I had already begun thinking about my other responsibilities. Life goes on. After months of this, I asked Abdul Hakim al-Iryani, the other Yemeni adjunct with an office at Zuberi about my troubles with Lutf. He told me not worry, "That's just the way Lutf is."

The rift between Lutf and me surfaced again when we were looking for a short-term computer specialist to work at the Ministry. Rightfully, Lutf wanted one whose language was Arabic. Nurredin, one of MAF's regular advisors, had found Meherzi, a young, fellow Jordanian. Dave Faulkenberry, whom I had asked to review his credentials, pointed out his lack of experience. But because his assignment would only be three months, I agreed to chance it. So, when I went to Lutf to say Core would fund Meherzi for three months, I thought this would satisfy him. Wrong! Lutf said, and Nurredin agreed that he should be *hired long-term on a trial basis! What?* I tried to tell them this sort of thing doesn't work. Being long-term requires all sorts of obligations on our part and commitments on the consultant's part that are unnecessary when hiring someone on a short-term basis. But they stood firm. So, I said I'd see what I could

do. Spencer was adamant against it. Then, I talked with Swanson. No way, he said. Finally, I decided to go over Lutf's head: I prepared the papers authorizing Meherzi for a three-month assignment and handed them directly to Mukbil for his signature. But the document found its way back to Lutf. He refused to sign. My subterfuge had failed. Lutf and I remained at loggerheads on yet another subject!

At the outset I liked Nurredin. He was about my age, had a pleasant personality, had been a prof at a Jordanian university, and he knew the MAF. But our positions grew strained: he as an advisor to Lutf and I as Core's Team Leader. Once, in an eight-page critique of an up-coming agricultural surveys for which he was responsible, I suggested stratifying farmers as our FSR study had recommended. He dismissed my idea out of hand then proceeded to *lecture* me on the meaning of systems as though I knew nothing about the subject.

I suspect my difficulty in dealing with Lutf was symptomatic of the MAF, if not the whole of society. Many in the Ministry showed up at 9:30 and left by 1:00. Their early departure allowed them to begin chewing qat, the mild narcotic that can stimulate discussions lasting well into the night. Leaving the office for lunch, I often would see males walking along the road with a bunch of small branches under their arms and chewing huge wads of green leaves.

The DGs within MAF seemed to focus on the needs of their own Departments, rather than the needs of the Ministry or the farmers they were expected to serve. Lutf, as Assistant Minister was in a position to coordinate MAF's diverse programs, but he didn't. Kharhash wanted a personal secretary, Amir as his personal advisor, a photocopier, and furniture. The DG for Irrigation pursued funding from the World Bank as a means of expanding water supplies. It seemed as though it was every man for himself. To illustrate, when AID said it would authorize

\$40,000 for photocopiers, computers, and furniture Mukbil spent the full amount for his own office.

One day when leaving the Ministry after work, I met al-Zubidi, DG for M&E, with whom I got along well. He looked down in the mouth, so I asked what was bothering him. He replied that, "Just working at the Ministry is depressing." He explained that our cost of crop production survey that was about to get underway stalled because the enumerators demanded a full day's *per diem* even though they would be able to return home each evening; then after they had collected the data, they wanted to be paid extra for the analysis. They may have had a point if their pay was so low that they took every opportunity to add to it. I probably should have looked into their pay relative to that paid elsewhere in the economy. Latifa, my sometimes secretary at MAF got fussed with me because I wouldn't authorize overtime pay, even though she was working less than the AID-required 40 hours a week. And she didn't get along with Mutahhar saying he was bossy. Perhaps Lutf's stomach ulcer, which was to caused him to leave the Ministry about halfway through my stay was due to the general environment at MAF.

By the time November rolled around, I had gotten acquainted with Core staff and my principals at AID, survived the Annual meeting, and had found Lutf a tough, but up-front negotiator. I continued arguing with Lukomski over the *matrix*, had periodic meetings with Swanson, and attended Sherper's monthly meetings. I had consulted with Amir over his water resources and agricultural research projects, Dave over his surveys on farm production costs, and Mutahhar on training. The training program was an important element of Core's overall program that included bachelor and graduate education in the States and Egypt, short courses in Jordan and Syria, and English taught in Yemen. The total number in long-term training abroad were 48, short-term training abroad averaged 32, and in-country training in English averaged 20. I even helped several females go abroad for training, which wasn't easy.

I realized that, aside from Lutf, I had not gotten to know many of the MAF staff. So, when Swanson suggested I meet with him and Amir in Kharhash's office I was glad for the chance. Kharhash was the one who came up to me the morning of the Annual meeting wanting to know if I *really was proposing* financial support for his Directorate, I said, "Yes, of course. This had been Amir's suggestion." Kharhash was a small and charming man who spoke English well, although somewhat mangled when he said, "Please, have a *sit*." As the DG of Agricultural Affairs he exuded confidence and demanded respect. His title sounds innocuous enough, but he commanded the Directors of Horticulture, Crops, Machinery, Forestry and Range, and Coffee, and was on the board of the Agricultural Research Authority. But with the limited profession staff supporting him, he clearly had more responsibility than he could manage alone.

Kharhash had developed a good rapport with Amir, a close relationship that had continued. This would be the first of many meetings in which Swanson, Amir, and I would spend hours in Kharhash's office listening to his plans for the use of Core funds. Chief on his mind during this first meeting was his need for a secretary and a photocopier. For some reason these two items had been left out of the Work Plan. But John, who was an easy touch, said, "Why not," which was simple enough. I just had to write an Action Memo for John's signature. But AID is a many-headed beast and apparently "easy" solutions such as this aren't always so easy. Mike Lukomski was to intervene saying it was against AID/Wash regulations that prohibited direct payments to Yemeni staff. That was the Yemeni Government's responsibility. I couldn't understand why Swanson didn't know this? But, maybe he did. His quick answer could have been his way of handling issues like this. On the other hand, we were able to fund the photocopier.

One day during one of my meetings with Kharhash, a Yemeni from one of the provinces burst unannounced into his office. The intruder was dressed in traditional clothes along with the ceremonial *jambia*. Without introduction, he began shouting at Kharhash demanding to know

why the Ministry had not authorized the building of a small dam for his community as had been promised. He was the representative charged with approaching the Ministry about this grievance. Calmly, Kharhash listened to him then assured him that he would attend to this matter. The intrusion, the dagger, the lack of formality, even respect, were part of the Yemeni culture: tribal, independent, egalitarian, and wild.

Later, thinking about Lukomski's denial of Kharhash's request for a secretary because AID regs do not allow for payment of salaries. If it were as simple as that, how was it that Core had been paying, with AID's approval, the salaries of three MAF employees? When I learned of this, I sent an Action Memo to Swanson as follows: After we had prepared the budget for Core's FY99 Work Plan, I learned that Core had been supporting three MAF employees through salary supplements, as follows Mohamed Masoud, Security Officer YR 1,154.87 biweekly; Sharaf Mohamed, Messenger YR 1,200 monthly, and Mohamed Adman, Janitor YR 300 monthly. The enclosed letters authorizing these payments imply that this arrangement has been going on for some time, apparently benefitting both Core and the Ministry. With your authorization, I will continue these payments. The Action Memo came back unsigned. Seems as though Sherper didn't want to officially recognize these under-the-table payments. Yet, he was willing to let Core perpetuate the violation!

During the following weeks I was to meet the DGs in charge of Extension, Irrigation, Marketing, Statistics. and M&E. The pattern was similar to my experience with Kharhash. They all had "urgent" and suddenly discovered needs for items not covered by the Work Plan: vehicles, computers, per diem allowances, conference trips, even construction of small dams. With Swanson's encouragement I covered these requests with Action Memos, which I would write and Swanson would sign, after I had estimated the cost and found an item in the Work Plan for which a substitution could be made. So, the *ink was barely* dry on our elaborately prepared Work Plan than major amendments began. By the time I left Yemen I had written 86 Action

Memos. That's as much of an indictment against the detailed planning demanded by Lukomski as anything.

Why hadn't Lutf made these requests known to me when I was putting the Work Plan together? I had asked him several times for his inputs; but he gave only general agreement with what Core had proposed. I concluded that the Yemenis neither think nor act like those in modern society. Nor should they! They have their own customs and tribal obligations, and a general lack of bureaucratic maturity. Yemen had only recently emerged from being a "backwater" country. How could it be that Lukomski and company had failed to comprehend this situation?

In early December Collom and Erick Vimmerstadt, CID's Financial Officer, were back in Sana'a to work on a new contract. For some reason Spencer had failed to tell me they were coming. With outside help Lukomski eventually succeeded in setting up the *matrix*. Now, he said he could keep track of Core expenditures as they occurred and make corrections to our program as needed. Great! I thought. Sounded to me as though he wanted to *micro-management* our project. Consequently, I continued to arguing against the idea, saying it was a waste of my time that diverted my attention from my responsibilities to the Ministry. Besides, the Ministry was neither able nor interested in working with us on the *matrix*. To prove my point, all that Mike had to do was to look at the number of Action Memoranda I had written during the few months since AID's had authorized the Work Plan. I might as well have been talking to the wall!

My initial meetings with Collom and Eric were perfunctory. They told me what they planned to do, not once seeking my input *even though I was the one most directly responsible for implementing the contract*. When they told me about their planned meeting with Lukomski, I suggested that it might be better if I didn't join them given our heated discussions over the

matrix. From then on, they left me completely left out of their contract negotiations. By the end of the week they were gone without touching base with me again.

Four months later I receive a copy of the contract signed by AID and CID. When I got around to reading it, I was surprised to find that the bulk of the contract dealt with the *matrix* and a new wrinkle called WDIMC, short for Work Plan, Development, Implementation, Monitoring and *Control*. M&E had been bad enough M&C was even worse. Was this AID/Wash's idea as Collom had suggested, or simply his own. I couldn't believe how complicated the whole procedure was.

Preparing the WDIMC required that I go through a "song and dance" to justify each of the modules and the components contained therein. It reminded me of the LogFrame where answers to questions often were contrived, repetitive, and irrelevant. So, little wonder that I rebelled against the WDIMC, which called for even more detail

Another provision of the new contract was to make Jeff Sole the Team Leader in charge of the Executive Office in Sana'a even though I depended on the services Jeff had to offer. Now, he had a life of his own, which included keeping an eye on *my expenditures!* CID had not yet figured out how our responsibilities meshed so that in November, 1988 Kellogg wrote a memo to his Finance Committee saying that the respective responsibilities for Jeff and me needed to be studied and spelled out. No kidding! Yet *they were already written into the contract*.

Back at CID headquarters Collom had become aware of the many Action Memos that I had written. Although these had been requested by the MAF and approved by AID, Collom began worrying about overruns in dollars expenditures. The nub of the issue was that with so much change to the Work Plan the signed agreement had become ineffective as a controlling

device. So, in June he sent Jeff and me a "directive" on Action Memos that complicated things even more. The memo made sense in that these Action Memos did indeed alter the agreement signed by MAF, AID. and CID. But, considering the way the Work Plan was put together, the lack of review by either AID or the MAF, and MAF's complete disdain for planning, Collom's belief that he could control project expenditures from his office in Tucson was delusional!

Time moves on and in late February Swanson joined me, as he sometimes does, in a meeting with Lutf. This meeting was particularly disagreeable in that Lutf blamed Core for the lack of progress in implementing the Work Plan. The next day Swanson sent me a memo asking me to respond to Lutf's accusations, which I did. Below is my partial response: I have repeatedly tried to get the Ministry's inputs on the scope of work for the catchment dams engineer, but without success. I think the MAF has changed its mind on this position. It now looks as though FAO will provide a construction-irrigation engineer. Looks like an overlap, but lets not press the issue at this time. Concerning the terms of reference for Mohamed Belhaj's position as an extension specialist: the scope of work for this position requires some statement about MAF's extension program, which I have repeatedly asked for, but not yet to receive. And so on.

Another incident occurred in mid-April. This time my memo read: During a recent meeting with Lutf he complained that I had not provided him with a status report. When I showed him the report addressed to him he countered that it did not provide enough detail on training. Please note that the second page of this report had the following: "We have sent ten participant trainees to the USA; two for MS programs and five for BS programs; two for short-term training, and one for special enhancement that we hope will lead to an MS degree. We also sent 11 to Jordan and two to Syria for short-term training; and we are about to send another trainee to the US for a BS degree." How much more specific should I be?

This illustrates what I am up against. No response from Swanson or Lutf What am to do? As for my not getting things done, I worked closely with Mutahhar on training given the absence of a long-term professional in that position. I even went out of my way to help several female agriculturalists go to the States for training. I was the communications link for Ahmed Taleb, the Jordanian that Audrey wanted as an Arabic cataloger and helped in the acquisition of relevant software in Arabic. Because of my experience in the On-Farm Water Management surveys in Pakistan, I was eager to get Dave Faulkenberry's input on them. But he declined, implying, I think, that he had his own schedule of work to do. Made me think that as the team leader Core's professional staff expect little from me on technical or program issues. It wasn't long after this that I concluded I was wasting my time here and determined to leave as soon as my contract ended the following year.

Then I received the following letter from Meiman. Just a note to send my regards to you and Vicky. I have visited with Bill Spencer regarding the challenges you as Project Leader are facing. I want you to know that you have my full backing in whatever tough decisions you must make. I have told several people here and at CID over the past year that there are very few people anywhere, and no other at CSU, that I could seriously recommend for the project in Yemen. I think you already know my very high regard for you, but sometimes it's important to express such feelings. I am sure Bill Spencer will help you out as needed. However, if at any time you feel my visit would help, please let me know right away.

It was about this time that someone fired a rocket at the Ambassador's residence, but only damaged the toilet in his bathroom. Fortunately, he was not sitting on it. When word got out, Mahler, AID's security guy pulled the team leaders and a few Hadda residents together where we huddle in his apartment during the afternoon. He goes on and on about the potential danger to those of us living at the Hadda Complex. We must be on our guard. So, he organized a patrol whereby pairs of us would patrol the perimeter of our compound beginning immediately and

extending through the night until he determines all is clear. We will carry a flashlight and a whistle. I don't remember what was to happen should we have sounded an alarm. The whole affair reminded me of an episode from a Maxwell Smart episode. A fighter pilot from the Vietnam war was my companion during our midnight to 2:00 a.m. shift. We made a dozen trips around the parameter without anything happening, which didn't surprise us. Most of us didn't take the event seriously. What did surprise me during our patrol was having the Vet tell me that he *actually liked* dropping bombs on those below. Was proud of it! We got the all clear the next day. But from that point forward, our driver followed a different route when driving us to work. Perhaps the five percent tacked onto our base salary was danger pay. I never thought the other five percent we received for working on Sundays was valid.

One late evening I stopped to pick up our dispatcher so that he could accompany me to the airport. Knocking on the door to his second floor room and being told to enter, I saw about 15 pairs of young men sitting on the floor against the four walls talking animatedly with each other, some looking into each other's eyes as young lovers might do. The dispatcher excused himself from the one he was talking to and joined me. They might have been chewing qat because that is what I've heard about the practice. The incident gave me the chills. But then, young men of this age don't have girls to date as we do.

On April 3rd Swanson tells me that he wants an estimate of Core's planned purchases for the next Work Plan in two weeks and its description by the end of May. So, here we go again. By mid-April I learned that John Schamper who had replaced Rifenbark had gotten himself crosswise with the Ministry and was *persona non grata* there, that Mukbil had told him not to step foot in the Ministry again. Despite my curiosity, I never found out what John had done. Schamper had recently come to Sana'a from a post in North Africa. He was blond, of good size, raw boned, and in his early forties. Although his name sounded German, he reminded me of some of the Iowa Swedes I had known. We did not take to each other. I found him a bully and officious. Perhaps he thought his PhD in economics gave him license to act that way.

After several visits with Lutf I learned of their equipment needs and, eventually, the programs MAF wanted to be included in the Work Plan. These meetings with Lutf were most often congenial. I missed the mid-April deadline for the equipment but eventually came up with \$450,000 for Toyotas, computers, irrigation equipment, a minibus, photocopiers, and furniture. Then I begin on the Work Plan itself. The Directorate of Irrigation came in with a *big* program while the rest of the Directorates were more in line with the previous Work Plan. After giving me some of his thoughts, Lutf asked me to write the Ministry's portion of the Plan. He said he wasn't feeling well. Looking more closely, I believed him. Not long afterward I learned that he had stomach ulcers and was leaving the Ministry. Abdul Malik was to be his replacement. He and I got along better, but we still found plenty to disagree about.

Inputs from Amir, Dave, and Audrey also were similar to the previous Plan. With that I began drafting the main components of the Plan; but, I still needed to prepare the budget according to the *matrix* and the WDIMC s. I came up with an initial amount for the next six quarters of \$5.6 million, to which Schamper agreed. Yet six days later he told me that the amount was too high and that AID would not approve any new positions. The latter meant that I would not be able to hire an assistant to do my "busy work." I guess AID didn't buy my argument that I spent so much time on details like this and not my job as team leader. Once I made the corrections I sent the Plan to Schamper asking for his reaction. He took his time responding but when he did he offered only a few general comments.

When it came time for me to begin on the WDIMCs I asked Schamper for relief from this procedure. He denied my request, saying that was in our contract; besides, he thought I could meet the requirement with a single page for each of the nine modules. By now I had concluded that he was not a details guy, or he wouldn't have said such a thing. Figuring he hadn't bothered to look at the issue closely and remembering Amir's trouble over contractual details I decided to follow the "letter of the contract." I filled out the WDIMC for my position as team leader,

which required 26 pages, rather than the one page Schamper had estimated. Sure, there were opportunities for consolidation, but this would take time to work out. Requirements for all of the other modules could reach 200 pages. Although having WDIMCs for a run-of-the -mill projects might make sense, this could not be the case for a complex project like Core. I blame Sherper and Lukomski for their failure to realize that imposing WDIMC on us was inappropriate. I think Collom was hoping for advancement. I think Spencer was "out to lunch."

The whole process of preparing the Work Plan took me till July 31st. All told, I ended up spending 3-½ months *just on the planning process*! When I told Schamper it was insane to spend so much time this way he said, "Write me a memo of what you propose and I'll see if I can't get the contract modified." Eventually, he approved the Memo. At least something positive came from my detailed example. The next day Vicky and I departed for the Annual meeting in Fort Collins.

While I was occupied with the Work Plan, Ahmed Araji arrived on April 24th. He was a fully tenured prof at the Univ of Idaho arrived. He was Spencer's and my first choice for the long-term Ag Economist position. Since he was born and had lived in Iraq neither Arabic nor the Yemeni culture should be a problem. He had told us that he and his wife were estranged, so he would be coming alone. Spencer and I had checked the references he had listed on his application and all were favorable. But, contrary to what I normally do I didn't check with additional references. That was a mistake, for he was to give me more than my share of problems. These problems were serious enough that they would lead to the dismissal of both of us.

The source of the problem rested with Spencer who authorized Araji's trip to Yemen before finalizing his salary. Spencer had worked with a Vice President at the Univ of Idaho in an effort to meet Araji's salary demands but had not succeed. Spencer said, according to Araji, that he *would try* to upgrade his responsibilities once he was in Yemen thereby paving the way

for the salary increase Araji wanted. Falling short of that, Araji told me that he thought that his contract was null and void and that Spencer would be obligated to bring him back home.

This background to Araji's hiring was unknown to me. So, a week after his arrival, Araji said he wanted to be appointed Deputy Team Leader. Finding this presumptuous, I told Araji as much. A week later, he demanded that his salary be increased. I found that request equally odd. What professional of his stature would think he could alter a signed agreement just by the asking? When he explained Spencer's promise to him, I told him I thought him *naive* to rely on some vague promise like this. Three weeks later he said he wanted a better office and one of the new Toyotas that had recently arrived assigned to him full time. Because Audrey spent nearly all of her time at the Document Center, I assigned him her office without first clearing it with her. A *big mistake* on my part. When I subsequently informed Audrey about the change she went ballistic. But there was no way I could assign him his personal Toyota when we only had three of them for our whole staff. Next, he wanted to have Abdul Hakim al-Iryani assigned to him full time. I couldn't blame him for that. Abdul was one of Core's bright lights, having worked as an adjunct to Amir when he was team leader. I did tell Araji that I would make Abdul available to him whenever possible.

Eventually, things calmed down and Araji and I began discussing the agricultural marketing surveys, which was to be his first important assignment. When he asked for my comments on the questionnaire he had prepared, I obliged. But then we got into another argument over my suggestions. It wasn't as though I knew little about agricultural surveys since I had worked with such questionnaires in Pakistan and Sri Lanka, and as part of the FSR study. Eventually the animosity between us subsided again. It was as though we were riding a roller coaster. Then, in early June he told me that his "wife" was coming to Yemen for three months.

Once here, she wanted to study issues important to Yemeni women. Further, she wanted the study to be part of the Core program. I about flipped. Not only had I had enough of

Women's Issues I thought such a study inappropriate for a country like Yemen. Aside from Latifa, who covered herself from head to toe, I had never seen a woman in the MAF building. I rejected the idea outrightly. Collom, who was about to return to the States, asked if there was anything he could do for me before he left. That was nice, I thought. So I asked him if he would talk with Araji about his wife's desire to work on women's issues. I shouldn't have been so expectant: Collom left without responding either written or verbally--a disappointment, but not a surprise.

Our trip to the Annual meeting in Fort Collins was a mixture of work and vacation. Vicky and I left Sana'a early in the morning and arrived in Larnaca to spend four-days. The 30 mile drive from the airport to the Apollonia Beach Hotel where we were to stay took us past small communities and farms, and grassed areas. We especially enjoyed the fresh air and the contrast with the high and dusty expanse of Sana'a. Behind the hotel was a beach 200 yards across that served the hotel's clientele. That afternoon we joined the others there. The water was clear but on the cool side. Because we had been unable to confirm our reservations to Athens we sought to get that done first thing the next day. It was only a short walk to the travel agency where the agent said, "I'm sorry, but I cannot confirm your reservations yet. This is the busy time of year and there are only a limited number of bookings to Athens." "But," we stammered, "We have confirmed bookings out of Athens to the States that we don't want to miss." She simply said, "I'll keep trying. Please come back tomorrow." So we went back to the hotel where we pleaded our case with the receptionist. In the end, the hotel manager was able to use his influence to get the confirmations we sought. That left us with a single, full day to relax and enjoy ourselves. The next day we took the short flight to Athens. The TWA agents in Athens apologized that the screening took so long. Although we replied that it was fine with us, we never found why it had been necessary. That done, we sat for several hours in the boarding room just watching passengers come and go. Just being on our way home was nice. Traveling "with the sun" we overnighted in Denver before going on to Ft Collins.

The next ten days we stayed at the Governor's Park Apartments on Drake near College Ave. While Vicky vacationed with Becky and David, Tim, Mike and Marty, Jaclynn–our two-year and first grandchild, and Paul I met with Spencer, Meiman, and Eckert so as to bring them up to date on the Work Plan and plan how we were going to entertain the Yemenis who would be attending the meeting. One evening Vicky and I had a serious talk with Mike and Marty about their money problems. Surprisingly, we only played golf one of these days.

For a whole week I worked at the Ag Economic Department close to Spencer's office making last-minute changes to the Work Plan. Swanson said he wanted our Plan reduced by \$100,000, which meant revising the budget. The Ag Econ's PC couldn't handle more the 640 k, so I rented a laptop, which for some reason didn't set well with Ron Tinnermeier, Spencer's boss. I couldn't understand why. which I thought strange. Here we had a multi-million dollar contract, and Tinnermeier worried about *renting a laptop!* I let Collom and Meiman know that I didn't want to stay in Yemen when my contract was completed a year from now. I interpreted their lack of objection two ways: they recognized the difficulty I was having there or they would be happy to have someone else in the job. Late Tuesday afternoon, Collom informs me that he had scheduled me to lead off the two-day Annual meeting at the Marriott the next morning. I refused outright saying I need more time to prepare. Shrugging, he said, "Okay, we'll schedule you the following day." Guess he thought I could just talk off talk off the top of my head.

We met the next morning in a large banquet room at the Sheraton. Mukbil headed a small team that included Malik and Kharhash. Amir had come to be Mukbil's interpreter! Present on our side were Kellogg and Collom from CID and Meiman, Spencer, and Eckert from CSU. I found the presentations the next morning routine with their "thank you's and it's good to be here's" as well as the challenges for the coming year. In the afternoon we met in small groups. I had a good session with Kharhash where he told me that he was pleased that I had incorporated verbatim the changes that he had telexed to me. That evening I thought about what

I would say the next morning then got up at 3:00 a.m. to prepare my notes. I didn't hold back in my presentation. I explained how bad I thought the contract was and how it had inhibited my work relations with the Ministry. I ended up saying I would be leaving next year in July. I thought my presentation came off well enough. I had been able to get a lot off my chest. Then came lunch and the signing ceremonies.

The next day I accompanied several Yemeni on a tour of the Big Thompson. Along the way we stopped at a roadside restaurant that catered to tourists. We sat at tables with a nice view of the stream tumbling down the canyon. My Yemeni companions were loud, demanding of the waitresses, and drank a lot. I was embarrassed to be with them, glad that I had announced my decision to leave Sana'a the next year. The following day we visited the San Luis Valley, where Jerry Eckert did a nice job of explaining CSU's FSR program there. We thought this might give them some ideas about working with Yemen's small-farm families. A couple of them listened, but most looked bored. Saturday they shopped. On Monday I met briefly with Kellogg and Meiman but can't remember what was said. Spencer was absent for some reason. That out of the way, Vicky and I flew to Myrtle Beach where we stayed with George and Lee for a few days, then flew back to Sana'a.

The next four months were more of the same, fraught with problems involving Araji, Schamper, and Ali Rammal. My struggle with Araji began the minute I Vicky and I stepped off the plane in Sana'a. Jeff met us there and said that Araji had been causing all sorts of problems while we were gone. The previous day Araji had called Spencer saying, I want to come home right away. You explained that CSU could not pay for the ticket, that Sole would have to pay for it. To hell with Sole, just get me out of here. I am frustrated. I cannot work with Shaner. I don't give a damn about this job. Shaner made sexist remarks about my wife. I am not joking. I will kill him. You said that I would have to pay for shipping my household goods back to the U.S. I'll burn them all if you don't do something!

Our best guess was that he was drunk when he wrote this. Jeff told me that he had learned that, before the call, Araji had gone to Ann Prichard's house saying he needed something to drink. So, they gave him a full bottle of vodka. I'm unsure why he thought I had made sexist remarks about his wife, unless it was not wanting to promoting women's issues. I don't think I had said she that had little to offer, even though I had thought that was the case.

The next day Spencer called early in the morning saying that CSU had agreed that Araji should leave. Despite AID's warning that I should stay away from him, I confronted him about his threat replying that "I have no problem with you. It's AID and the others." After conveying to Swanson and Schamper what Araji and said to me, they felt the matter resolved, that Araji could stay. Even with a truce between us we still had our rocky moments. Then, I wrote a two-page memo to Araji that began, "I sympathize with you about the lowering of your base salary. Apparently you had some target value in mind during your negotiations. I also understand your complaint that your wife's expenses in coming to Yemen had not been paid." I summarized by saying, "I am willing to take the case of your salary to the Mission for reconsideration provide you supply me with further details about your past income. Recovery of your wife's expenses depends on your willingness to remain here the required amount of time." A week later Araji wrote, "I do not intend to leave. I have no conditions and anticipate a cooperative and scientific working environment. I appreciate your offer of help." Thinking the matter resolved I telexed Spencer in which I asked him to withdraw his acceptance of Araji's resignation.

In mid-December Araji called to say he was sick after having been absence from work for a week. Then the dispatcher told me that Araji had taken one of our three Toyotas two weeks ago and had not returned it. Learning that I went to Araji's apartment and there it was! Holding my breath, for I didn't know how he might react, I knocked on the door. Araji opened it, looking anything but sick. I told him I expected him to return the Toyota the next morning. Talking this over back in the office, we surmised that he was using the vehicle to show his wife

around town. After that, I routinely checked under our Mitsubishi, which was parked outside our apartment, on the possibility that he would seek revenge by planting a bomb. After that I circulated a memo to my staff laying out the procedures for the personal use of Core vehicles. After reading it, Araji stood in the doorway, glowered at me, cursed, then threw the Toyota keys on the floor. That was enough. I telexed Spencer saying that if Araji didn't cooperate, something needed to be done-- possibly docking his wages.

My next problem was a continuing one. It revolved around the uncertainty of funding on the Mission's part and the MAF's disregard for the Work Plan. Shortly after I had returned from the Annual meeting Schamper chaired a meeting of the Core group. He explained that, although funding for the first quarter allowed expenditures of \$270,000 only some of that money would be available. It has something to do with forward funding. Then he proceeded to list which parts of the Work Plan we could implement and which we could not. Only four weeks after the Annual meeting Mukbil said he wanted to add seven items to the Work Plan, amounting to over \$100,000. So, the Mission is ordering cutbacks while MAF is requesting additions! It's as though the two organizations live on separate planets. Am I the only one who recognizes this? Soon thereafter, Schamper sends me a memo saying that he will consider no new Action Memos unless we take something out of the existing Plan. Fair enough. I can work with that. Another week passes and Schamper comes up with the news that now he can authorize half a dozen expenditures itemized in the Work Plan and forecasts that \$1.7 million will be available to us through March, which he can confirm next week. Two weeks go by and he says all local purchases are blocked through March, but that funds are available for salaries and programs already underway, such as the agricultural survey. Finally, in early December Schamper announces that we cannot buy anything until AID/ Wash provides new funds, which might not be until March. All these conflicting orders ought to have made Schamper feel uncomfortable, but if so, he didn't show it.

Ali Rammal was my next problem. He is Iranian-born, tall, dark, has a pleasant smile, walks with a limp that I guess is due to a wooden leg, and has a wife who is Russian born. The next day, after they are settle into an apartment similar to ours, I introduce him to AID and the Ministry. The day after that, we have them and a few others over for dinner. Within days he says he wants to go to Dubai for a refresher course. At first, AID denies the request saying, "I thought we were getting an expert." Eventually they agree to his ten-day stay there, which is okay with me. However, when he returns and hands in his expense account I find that he had rented a Toyota Crown Royal, the top-of-the-line, full-size luxury sedan. Slightly miffed I asked him, "Why the extravagance?" Pointing to his leg, he said "I needed the leg room." My fault again. I should have worked out a budget with him beforehand.

Settling into his job Rammal visits the computer systems at the MAF and Core offices. His next job is to suggest upgrades, expansions, and training for MAF staff. It wasn't long before I hear that he an Audrey are at odds, which shouldn't have surprised me because I've found that she's easily annoyed. I suspect he probably told Audrey what he planned for the Document Center, not knowing how protective Audrey is of her turf. Two months pass as Ali delves into his work. By now he has finished his report on upgrading the Ministry's computing system. Without my knowing it he had given his report to the newly appointed Minister, Nasr al-Aulaqi, whom I had met when he was president of the University. That floors me. How could he pass out such a report without letting me review it first? I informed him that I must approve all Core reports before they leave our office. He looked at me quizzically as if to say, "What's all the fuss about?" Recovering, I ask for a copy of his report so that I might review it. And that gives me a second shock. He had proposed installing a mainframe system for the whole Ministry, not unlike the huge system in place at Stanford when I was there *22 years ago*.

While I knew something about the subject, I wanted backup support. So, I asked Dana Thomas, Faulkenberry's replacement, for his thoughts. Besides critiquing the way the report was written, he agreed with me that Ali's recommendation for a mainframe was misguided. I also asked Larry Dornacker, a computer specialist who has been working in Yemen for years.

Larry goes much further in his rejection of Ali's report. He says that the author should slow down and take one step at a time; address the needs of the systems already in place using Wang and microcomputers at MAF for general use, data collection, and analysis, and the Document Center's system on the HP 3000 and MINISIS because the power of mini and micro computers continues to increase rapidly, concluding it a mistake to commit to a mainframe at this early date.

With the above information and conclusions I went to Ali suggesting that he scrap his report and start over. I said that I and others would be glad to work with him in designing an alternative approach, that I was sorry we couldn't have worked more cooperatively. I conclude by telling him that I recognized his good credentials and thought that he could do a lot for the project if he channeled his efforts in the right direction. To my dismay, Ali persists saying that the approach he had taken was the right one. He even ends up *critiquing my management style!* Why should my problems with Ali have surprised me? I knew that the CSU had considered him a marginal third choice. Later, Sherper asked me for a copy of Ali's report. Since I had kept this affair quite, I figured Ali must have gone to AID over our disagreement. What a rat race!

I also had other problems. My first meeting with Kharhash after returning to Sana'a was rough. He said that the Deputy didn't like what I had said at the Annual meeting, which didn't surprise me. Then, at a meeting with Sherper present Mukbil *ordered* me to spend half of my time at the Ministry working with Abdul Malik. That's when I retorted, "Tell me what you want done, *not how to do it!* Doesn't anyone there accept anything I say? Later, Jeff tells me that the Minister is complaining about Core's poor performance. Why do I hear this from Jeff rather than Mukbil himself? Then, Audrey resigned by writing a letter to Sherper saying she couldn't work with me. This, despite the letter I sent to her and Sherper saying that I was willing to try. Mutahhar still fails to contribute to Core's monthly reports to AID while continuing to fuss about my evaluation of his performance. Nothing new since our relationship waxes hot and cold. Then Jeff decides he needs additional administrative help, so he *hires Sherper's daughter and puts her in the office next to mine*. I had never quite trusted Jeff, thinking he was looking

after his own interests at my expense. If Sherper wanted to learn about what was going on, this would be a good way to do it. But, I couldn't dwell on such problems because I had too much to do.

On the home front, Vicky was less forgiving. She had heard that our shipment of food from the States had been sitting in Customs for weeks. Irate, she went directly to the Minister of Foreign Affairs. Sitting in the waiting room she watched others who kept going in ahead of her although they had come in after she did. This didn't improve her disposition. Then she sees Amir, who nods to her and walks directly into the Minister's office—That does it. She said to the secretary, "You've kept me waiting for over an hour and then Amir goes right in to see the Minister. Amir works for my husband. We've lived in many developing countries around the world and we've *never* been treated as badly as we have here. If your government doesn't want us send us home. We'll be happy to leave." With that she got up and left. Not long after that Jeff told us without our asking, "Don't worry about checking your consumables out of Customs." Apparently, he knew more about our situation than we did.

Not all was negative during this period. Replacing Faulkenberry, Dana Thomas and his wife arrived in September. He was young but qualified, professional, and quiet. We got along fine. Sunny Langham, arrived about the same time. He replaced Warren Noland as Team Leader of the Ibb project. But instead of living in Ibb he settled in Sana'a and occupying one of our offices at Zubari. I had known him since visiting NMSU in Las Cruces. Sunny even tells me he supports my management style. Few here had said as much. And, as encouraging as anything, my relationship with al-Iryani continues to improve after the Deputy appoints him as my counterpart at the Ministry, replacing Abdul Malik.

Because al-Iryani has an office at Zuberi, I see him nearly every day. That way I *did* have daily contact with the Ministry. Newly appointed to the job, al-Iryani explored his new appointment with an elaborate appraisal of his and my joint responsibilities in managing Core. I

wrote a four page response that was strongly supportive with only a few minor points of disagreement.

Then, without notice a Review Team arrived in late November. Its leader was someone associated with CID, the other two were Jim Meiman and Larry Boone, CID's Associate Director. They told me their purpose was to evaluate the Core project and make recommendations. The next day they spent two hours with me in which I told about Core's accomplishments. I did most of the talking while they did most of the questioning. A rather bland opening session, I thought. For the next 10 days they met with officials at MAF, AID, and the Core team. On the ride over to the AID office, I expressed my frustration with Lukomski's matrix and Collom's WDIMCs and how the Action Memos diverted so much of my time that I couldn't be at the Ministry half the time, as Mukbil and Sherper had demanded. They spent the last couple of days writing their report. I mainly listened as they presented their findings to our team, yet felt disgusted that so little of what I had told them showed up in their presentation. With their visit out of the way, I turned my attention to the many things I needed do before Vicky and I would leave on our R&R, just a week away.

Taking advantage of AID's practice of granting an R&R in the middle of two-year contracts, Vicky and I had planned a trip to a resort on Kenya's coast north of Mombasa. As usually, Vicky took care of the details. She asked around and settled on a tourist agency run by an Indian family who had settled in Sana'a. We were to be gone 12 days.

We arrived in Nairobi after a short flight, rented a small, nondescript vehicle, checked into the Norfolk Hotel, then walked the short distance to the downtown area. The Asian shops, the Stanley Hotel, with its large thorn tree, and the tourists were still there. The Norfolk had lost none of the charm. The next morning we drove east to Mombasa. This road to the coast had deteriorated since we last took it, now full of potholes and ragged edges. We diverted to the Tsavo game park for lunch at the Kilaguni Lodge, which was still as nice as ever. In earlier

years a game park lodge such as this had been beyond our means. Driving around we encountered no elephants, in contrast to what we had seen before. Continuing on our way we stopped at a modest, but nice motel. Rising early the next morning I sat on our small patio taking in the "ocean" of grassland stretching to the horizon. The view remembered me of the game parks we had visited before. Then I viewed a lone lioness walking slowly through the grass about a mile away. All seemed peaceful, yet there was no barrier to prevent that King of the Jungle from turning and coming straight towards where we were staying. As if that weren't enough, as we began our journey, we spied another lion sunning itself on huge boulders bordering the highway only a few hundred yards from our motel. A Kenyan was walking along the road, apparently unaware of the lion above him. So, while we saw few lions at Tsavo, we were indeed in lion country!

Our drive to Mombasa this second day did not take long. We intended to arrive early so that we could explore the city again. Once there we passed under the sculptured elephants tusks bordering the central park. We stayed at the Manor Hotel, an interesting colonial place with white clapboard siding. Wandering around we stopped in an Indian shop where we found intricate Makondi carvings. When it came time to pay for the one we had selected, we asked the owner if he would accept our personal check and mail the carving to us. He said, "Oh, yes. Much of my business is with Americans. We have learned to trust you!" That required a lot of faith on both our parts. That evening Vicky and I decided to have a drink before going out to eat. The room we entered was light and airy, bordering the street where sitting at s simple card table we could watch pedestrians walking by. This was no typical bar with a low ceiling and dimmed lights, but one that resembled the drinking place where we had been in Trinidad. Feeling the British connection we ordered Gin and Tonics.

The next morning we began the 75 mile drive north along the coastal highway. Twenty miles out of Mombasa we found the Sun N' Sand where we as a family had spent a delightful week years earlier. Then the dozen cabins were simple, as was the lodge. From either our

cabin or the dining room we could see the beach beyond an expanse of grass that was shaded by an abundance of coconut palms. Aside from another young couple and those who ran the place, we had it all to ourselves. Vicky and I remembered our misgivings as we entered the place for the first time and learned that new management had taken over, without knowing that the place had previously been a brothel!

Now, to our dismay, we found a four-start beachfront resort. A mass of structures covered much of the area: crowded with four-story rooms for the guests, buildings that housed restaurants and meeting rooms, concrete walkways, and multiple swimming pools. While we were still in Ethiopia I had heard about European and Near Eastern investors looking to investment in "sun and sand" locations catering to those wishing to escape the long winter months. This place was the embodiment of what they were looking for. For us, it was tragedy!

Back on the road we continued on to Malindi. Nearing the outskirts of the town, we began looking for signs that would direct us to the Hemingway Lodge, where Vicky had made reservations. Not finding the place, we asked several of those walking along the road for directions. No one seemed to know about the Lodge, but one gave us directions to a place with the same address. Checking in at this nice looking resort, we asked the management about our reservations at the Hemingway. He told us that he had bought out the place several years ago and had changed its name. No, he didn't have our reservations, but if we wanted to stay and if there was a cancellation he would put us up. After a rather long wait, we finally checked in.

For the next four days we swam, snorkeled, sat around the pool, and made friends during "cocktail time" at our beach-side bar. The lodge's waiters were an amusement. They were young male Kenyans with little experience. Their most pressing task seemed to be keeping a towel draped over the forearm while waiting on tables. We never figured out why management thought this so important. It certainly wasn't to us. Vicky and I had to hide our grins. One

evening we joined two other couples and walked a quarter of a mile north along the beach to a similar place, but one with a much livelier crowd. Among this group were several retirees who lived in the area. We listened to them talk about a recent incident in which thieves had raided this very place holding those there for several hours. No one was hurt, although those who were there lost their wallets and jewelry. Recovering from the experience, he now thought the experience *thrilling*.

With our time up at this pleasant place, we got off to an early start for our two day drive to Nairobi. Without incident we followed a well-paved "short-cut" back to the Mombasa-Nairobi highway. We looked forward to staying at a first-class resort some five hours' drive from Nairobi where our travel agent had made reservations for us. . . . we thought. Checking in, the clerk was apologetic, but said he had received nothing about our reservations and that they were fully booked. This presented us with a problem. Driving on to Nairobi would have meant hours of driving in the dark, something we didn't want to do. So, we decided to have a drink on the veranda to think it over. If nothing else we could at least enjoy the beautiful view of the wilderness before our eyes. Before long we struck up a conversation with a fellow drinking by himself. He told us that he was Pakistani by birth and now a naturalized Kenyan. After trading stories about Pakistan, we told him of our dilemma. He told us about Camp Ndoma not far away. It was a rustic hunting lodge used by native Kenyans. It wasn't much, but at least it was a place to stay for the night, if a room were available. So we retraced the way we had come, holding our breath as we drove along a dirt path off the main highway. After a mile or so we found a shack with someone in it. By now, it was almost dark. Yes, they had a place for us, if we weren't fussy. At this point we would take anything.

What the caretaker showed us was indeed rustic. The single room he showed us was covered with dust and full of cobwebs dangling from exposed rafters, the walls were without sidings, the windows were shuttered, and the floor was wooden planks. But thank goodness we

had our own bathroom, the bed was comfortable, and the sheets were clean. During the night we heard a great commotion next to the building. We could even feel what we thought was an animal bumping against the wall. When we looked outside the next morning we found plenty of large hoof marks, which might have been made by an animal the size of a kudu. Reaching Nairobi the next day we drove out Ngong Road to where we had stayed ten years earlier then to the Royal Nairobi Golf course where we had been temporary members. Things looked the same as before.

We flew to Addis and check into the Hilton, which looked as nice as ever. We took a brief swam in the large pool shaped like a cross. We wanted to rent a car, but none were available. It had something to do with Mengistu's suspicion of foreign tourists. We ended up hiring a taxi to drive us to the old Villa Verde where we especially liked the *scampi plachada* (grilled shrimp in garlic sauce), but it wasn't the same. But Costelli's at the Piazza was as excellent as ever.

The next day we hired a taxi to drive us out to our old neighborhood. And what a disappointment that was! Instead of the widely spaced homes amidst open fields of grass where those expatriates fond of horses could arrange the annual gymkhana, we now drove the busy highway that led to Jimma. Housing complexes had crowded out the open areas. A stop light graced nearly every corner, including the intersection between our house and the golf course. The International School was still there, but was now surrounded by houses instead of open space. The golf course was long gone. It had ceased to exist once the Emperor was gone and the Russians had taken over. Sometimes it's better not to go back! Absorbing this initial shock, we drove down the road to the beautiful three-story brick house where we had lived. It was still there and appeared to have been well cared for. We asked a passerby whether she knew Wurkuha whom we liked so much. Surprisingly the lady said, *me godenya!* (my good friend). She told us that Workuha was in good health and working at the hospital near the *Sedistkilo*. So,

we drove there and found her! She was pretty as ever. Amid hugs and tears, we learned that she now had a good job at the hospital as a nurse's aide. Her husband had maintained his job as a driver for one of the embassies. They were doing just fine financially, and otherwise.

That evening we had invited her and her family to dinner at the Hilton where she brought us up to date on the tragedies the country had experienced following Haile Selassie's downfall. The next day we drove around town looking at the places we had known and liked. We stopped at the Gion Hotel that had maintained the charm we had known. We walked down the hill to where the China Bar had been, then along the wide sidewalk in front of where the AID building once stood. Both were gone. From there we crossed the street to a wide open area next to the soccer stadium. As we were walking Vicky said, "Watch out! Those two guys are coming right at us." She cradled her purse with both arms and brought up her knee to word off the smaller of the two. The larger one bumped his chest against mine. Failing to pull off the heist, the hurried away. The older looked as though he might be in his early twenties, the other in his teens. An attendant at the gas station nearby had seen what happened. He came to us to apologizing and saying we Ethiopians should treat our visitors better. His concern and manners reminded me of what we had always liked about Ethiopia. The next day we took the short flight back to Sana'a.

When Vicky and I arrived the next day, we heard that things had gone to pot while I was away. Because Araji had refused to take orders, CID and AID jointly agreed that he had to go. Although he had been scheduled to leave three days ago, he was still here and rescheduled to leave on January 3rd. Swanson warned me not come to the AID office where Araji and I might run into each other. Subsequently, Araji and I did pass each at the MAF where I watched him as he kept his eyes averted. Guess he wasn't as dangerous as Swanson thought. Finally, he boarded an Air France flight back to the States. But my problems were not over.

Soon, I was to learn that the new MAF Minister had told Sherper that if Araji goes, Shaner goes. Apparently, Araji had been playing the game those in the LDCs are want to dogaining influence through one's connections, rather than performance. In my next meeting with the Mukbil he asked me how things were going? When I replied that I was getting along fine, I thought I perceived a smile. At the time, I didn't know that I was on my way out.

In a couple of days I received a conference call from Spencer, Meiman, and Kellogg telling me that I was being replaced and should leave in four weeks. What a shock! I argued my case, but to no avail. They explained that Sherper had said "the chemistry was not right." Then I began to wonder, why was it that I had to leave? Spencer had taken the initiative in getting Araji sacked. I was vexed that neither Spencer nor Meiman had stepped in to warn or support me. Given my close communication with Spencer and the assurance from Meiman, I would think that they could have argued my case. Before long Spencer was back on the phone his usual friendly self talking as if nothing had happened. He had no idea how offended I was.

I was in shock. I hadn't seen this coming, but I should have. I remembered that more than one of the team leaders attending Sherper's monthly meetings had been sacked. I was darkly amused that Swanson and Schamper hadn't shown up at the last team leaders' meeting. Earlier, Kharhash had told me that my fate had been sealed in Fort Collins when I said I would not extend beyond next summer. Meanwhile, I learned that, while I was gone, the Minister had taken one of the two Toyotas that Core had received for its own use. During the early stages of my disappointment and anger I flayed away at Meiman for not helping me out. Had I bothered to read the Review Team's report before leaving on vacation I wouldn't have been shocked over my dismissal. For there it was clearly written: "CID/CSU should begin the full-scale recruitment for a new Team Leader. I might have thought that meant in July after my contract was completed. Now, I knew that wasn't what they meant. Later, when back on the CSU

campus, I chanced to be talking with Meiman and Spencer when the latter asked what I thought about my experiences in Yemen. Jim quickly intervened saying, "Lets not go there."

Despite the struggles I was disappointed that I wouldn't be able to complete the full term of my assignment. Towards the end I was making progress, primarily by the support al-Iryani and Saif were giving me. They both thought that the order for me to leave so soon was excessive; and even Abdul Malik thought my dismissal was abrupt. By the way al-Iryani was not just anybody in Yemen. His namesake with its tribal connotations had been the President of Yemen less than 15 years ago. Acting on their own, al-Iryani and Saif had visited Swanson and Schamper saying that I should stay, which surprised them both.

For my part, I felt that given enough time I could have turned things around. I was on much better terms with the replacements for Faulkenberry and Audrey, and Araji was gone, Mutahhar soon would at the Ministry; and Sunny Langham openly supported me as Team Leader. That still left Amir and Rammal in place, but by now I thought I knew how to could handle them. Al-Iryani who had replaced Abdul Malik would have an office at MAF, which should settle the issue about my presence there. Schamper had already agreed to streamlining the WDIMCs, and with an assistant to work on the *matrix* I could demonstrate my abilities as a development economist. But, alas, this wasn't to be.

And that made Vicky happy, even though she had adjusted well enough to life in Yemen.

She had joined the International Women's Association, a diverse membership of about a hundred. It wasn't long before she became its president! One of the Association's activities was to raise money and provide support for distressed women, a delicate undertaking in Yemen's male-dominated society. Vicky became friendly with one of the members, a Syrian lady who warned her to be careful what she said. "There are spies listening in." After Vicky had

returned home from one of these meetings, held at the Taj Sheba Hotel, a popular downtown hotel for tourists and residents, she discovered that the opal setting in her ring was missing. Figuring that she had lost it at the hotel she returned as quickly as she could, but without much hope of finding it. To her great surprise, one of the waiters had discovered it while cleaning up and was waiting for her to claim it. Amazing what honesty can be found around the world! Vicky also struck up friendships with the Benjamins, who were here on a private oil company contract, and with the Johnsons with whom we played bridge occasionally.

In February of our first year Vicky had flown with some of her friends to Dubia on a shopping trip. After a week, she returned with loads of things, including a TV with a video tape attachment. With Hadda's well-stocked library next door we were able to view a wide variety of videos. We didn't attend the local movie houses, even when they showed American movies, because men and women had to sit in separate sections.

Vicky was occasionally invited to ladies' tea in the old section of town where she had to climb narrow, winding stairs with their uneven tread. The typical room where tea was served would open onto a flat roof that served as an expanded balcony. From there she was able to see the preponderance of uncompleted buildings with reinforcing rods protruding from an unfinished second, or third story. Curious about this she was told that as long as a building remains unfinished the builder's tax remained low. So, these building "technically" never got finished. The *mufraj*, where the host's women servants served tea, was a large room with cushions arranged on the floor against the wall where the ladies sat. The unveiled ladies talked while some smoked the *hubbly bubbly* and others chewed qat. Vicky was struck by their intimacy. Once over tea and snacks Vicky struck up a conversation with one of the young ladies sitting next to her. She told Vicky that she was studying history at the Univ of Yemen. The young lady told how the few women taking the class were veiled, sat at the back of the room, and took no part in class discussions. After awhile Vicky turned to another young lady sitting near her

and found that she too was taking the same history class. Then, Vicky said, "You two must know each other since you are in the same class." This one looked puzzled for awhile then asked the other one to cover her face with her two hands so that only her eyes were showing. That did it. "Yes," she said, "I do know you!"

Shortly after we arrived and were entering our apartment building, Cecily, a young mulatto of about nine threw her arms around our waists in a happy greeting. Various times when we would meet after that, Vicky would call her endearingly "pumpkin." And Cecily would respond with a feigned pout, "I'm no pumpkin." She was the daughter of Curt Walters, an AID accountant, and his wife, an American Negress. The family that included Cecily's older brother, lived on the ground floor of our building. One evening we joined them for dinner in their apartment. Curt turned on the record player and Vicky and I jitterbugged to their great delight. Years later, when Cecily might have been around 15, we visited them in Islamabad and, to our great disappointment, Cecily appeared not to remember us, almost to the point of rudeness. We wondered if she were suffering the pangs of a teenager embarrassed because of her mixed blood. If true, how sad to see this change in her.

But not was all "fun and games" for Vicky. She had weathered an excruciating ordeal to remove a boil on her a "private parts" in which the Embassy physician *operated without anaesthesia!* She had gotten through the lancing well enough, but when the doctor inserted a string coil to drain the infection Vicky couldn't keep from moaning. Something I heard from the adjacent room. Even so, the boil healed and Vicky returned to good health and spirits. Back home, when Vicky described the procedure to her physician he called the doctor a *butcherer!*

Although much of the foregoing dwells on my fights and problems, I remember driving through the center of town enjoying the thought of being in this ancient city with its narrow streets and bustling shoppers in traditional dress.

And Vicky and I had some good times as well. We took up tennis, which was a new game for us, playing a couple of times a week. I was surprised how quickly we picked up the game. I even beat Collom, who had been playing the game for years. Several times a week I jogged around the parameter inside our compound, with Freckles close on my heels. Two and a half times around was a mile. Shortly before we left, a group of Hadda residents plugged the leaks in the concrete and repaired the filtration system. So that was a possibility, although the water was cold. The only use Vicky and I made of it was to attend an evening barbecue there. We had the option of swimming at the Sheraton by paying a small fee, but we seldom did that because the water there was cold as well. But we did enjoy the authentic Indian restaurant bordering the pool.

Once a month we called our kids and my dad to know how they were doing. Through the long talks with Spencer we were able to convey messages to my Dad, which Spencer dutifully did. In November we were saddened to hear that Mike and Marty were divorcing. We thought money problems were the cause, which we came to doubt. Being so far away was difficult, especially on Vicky. She talked of flying home to see if there were anything she might do; but, eventually gave up on the idea. It is times like these that make overseas life difficult.

Adjacent to our apartment was a room that served as a chapel where we attended Catholic services every other month given by the German priest assigned to our region. He was circumspect in his homilies not wishing to affront the hospitality of his Muslim hosts. Assisting him were Mother Teresa nuns.

When I wasn't overwhelmed by work, Vicky and I celebrated "Thank God it's Thursday" by inviting Al Arp, Core's accountant, Faulkenberry, and Curt Walters, in for snacks and drinks. During football season, we watched tapes of Bronco games that Ed Dooley sent to us.

It was our practice to have Core visitors over for dinner. At one of these events we invited Warren Fairchild, the World Bank representative whom I had worked with in Pakistan. He came to Yemen to help establish an Irrigation Directorate at MAF. And we attended parties within the Hadda compound that were thrown by the Prichards, Swansons, Askaris, the team leader for a horticulture project, and the Mahlers to name a few.

More than once Mohamed Saif and his Scottish wife, Creanna invited Vicky and me for lunch. They had met while he was going to school in Edinburgh. Vicky and I had seen instances in which such marriages didn't work out once the husband returned home. But this was a good fit. Mohamed with pleasant, open-minded, and "internationalized." His feisty and pretty wife got along nicely in Yemen. Being bilingual and an excellent secretary she was in high demand for the high-paying jobs that occasionally popped up.

Before we had our own transportation, I would sometimes arrange for a Core Toyota and driver so that Vicky could go shopping for groceries. Tagging along, we experimented with a few places and finally found one frequented by long-term expatriates. This one had a large variety of fruits and vegetables, as well as the standard staples. Vicky shopped elsewhere for meat and poultry. When we needed something in a hurry we relied on the little store adjacent to the Hadda.

Growing tired of being without wheels, we eventually bought the Lockarts' Mitsubishi when they offered it for sale preparatory to their departure. This gave us a new-found sense of freedom. Vicky could shop as she liked and see an occasional friend. And we tried out the limited selection of restaurants in the city including one that served French cuisine and another that served Vietnam cuisine. Orville Heim, our friend from Venezuelan days, was still working on the Stanley Engineering project. So, Vicky and I would go out to dinner with him and Rosalie occasionally. Perhaps the most interesting of all was the Yemeni place that served us a large fish blasted with a blowtorch and served with unleavened bread. It was delicious! And

we celebrated the Chinese New Year with the Johnsons. Only during our last weekend did we visit Wadi Dhar, a popular tourist sight near Sana'a with its abundance of birds and trees, and houses perched on rock outcrops.

Occasionally Vicky and I would drive to the American Embassy for the Marine Club's Thursday-night Happy Hour. The small contingent of Marines were in Sana'a to guard the Embassy. They were clean-shaven, lean, muscular, and polite—responding, yes or no mam or yes or no sir whether the person was in uniform or not. The Club was in a darkly-lit small shack with a bar in one corner and tables off to one side. Smoke clouded the air as toned-down music flowed from the jukebox. We would sit at the bar, have a couple of drinks, joke with the bar tenders, then leave. This too was a nice diversion.

We also went to the Embassy's picnics celebrating the Fourth of July, Memorial Day, and Christmas. The Embassy was set within an expanse of well-kept trees, shrubs, and grass in the middle of town protected by high walls and armed sentries. The many buildings were of ancient, Arabic architecture: a series of small rooms, narrow hallways, and low-ceiling hallways. I found the place charming. At these events large crowds of Americans and their guests strolled around the grounds, played volleyball and other games, ate, and drank. Although Vicky and I usually do not seek out other Americans when on overseas assignments, our access to them in Sana'a was limited, which made these times pleasant.

As one of the Team Leaders in Sana'a I was invited along with Vicky to an occasional dinner thrown by our Embassy. At one of these in which the Attache turned her position over to the new Ambassador we were sitting at one of the tables along with 100 others under a large protective awning when looking up we noticed guards with AK47s patrolling on top the eight-foot wall that surrounded us. We weren't sure whether to feel safer with the guards overhead or that they were needed in the first place. What amazed us was why our government

so often assigned females to important Embassy positions in Muslim countries, where the male culture dominates.

One beautiful summer day we attended a large picnic just up the road from the Hadda complex that was thrown by an American oil company, the one where Benjamin worked. Walking back from the affair, I thought how comfortable I felt living in this strange country. The Benjamins invited us and another couple to their home for Thanksgiving dinner. The large house was located on the city's edge with a spacious grass yard with well-tended trees and shrubs. The upper part of the walls were adorned with the ever-present semicircle of red, green, and blue glass

We attended the annual British Bazar, which was a fund raiser. The cloth dolls that Vicky had made sold out quickly. We had been invited because of the contacts Vicky had made at the International Women's Association. Then there was the Marine Ball, which was an elegant affair with a sit-down dinner and a dance band with lots of women in fancy dresses and men in tuxes and uniforms. The band, which was an import from the Philippines, played and sang as though they came straight from the States. As usual, Vicky and I danced a lot.

Wanting to learn Arabic Vicky and I signed up for a "beginners" course taught at the British Embassy. During the lunch hour I would focus on learning the alphabet figuring this would be a good way to start. It had worked in Ethiopia when Vicky was studying Amharic. What made the Arabic script difficult was that each letter was written differently depending on whether its position at the beginning, middle, or end of a word. We had a difficult time of it because nearly all of the fifteen who attended *were not true beginners*. So, when our Yemeni instructor began writing in Arabic on the blackboard then asked us what it said we were clueless. We a textbook we had nothing to refer to. At the end of the session Vicky wrote something in shorthand then asked our instructor what it said. Puzzled, he said he didn't know. "Well, that's

the way I feel when *you* write something in Arabic. That was the last time she attended. I struggled on for a few more session then quit as well.

Once Vicky and I accompanied a group on a trip past Mareb to see the dam, its reservoir, and the irrigated area served by it. Adjacent to the dam was a small tree-studded valley that looked like an excellent picnic area had we wanted such a place. Mareb itself was reputed to be the site of one of the Queen of Sheba's residences. We had seen the other one in Ethiopia. Another time I visited a large central-pivot irrigation scheme in the dry desert to the east; and still another time I went with an AID group to see the orchards to the southeast.

Spencer arrived to fill the gap until a new team leader could be found. Our overlapping was less than three weeks. He had stated firmly that he would not take the position of Team Leader. So, what does that tell you about his commitment to the project? At one point he asked me what I thought of Jeff Sole. In a pique, I said, "Why do you ask my opinion now when you haven't accepted my opinion on other matters?" His weak reply was simply, "I've always respected your judgment." Say that again, I said under my breath.

Then, 16 days before Vicky and I were to leave, a *deus ex machina* happened again. (The first had been the call asking if I were interested in going to Peru.) Dean Jansma, Dean of Agriculture at the State Univ of Pennsylvania called asking if I knew of anyone with knowledge of FSR who might wish to come to Swaziland for a 30-month assignment. I told him I would search through my files and get back to him. When I did, I gave him the names of a few who were both qualified and might be available, then add that I might be interested. Picking up on the latter and after a long talk, he said he wanted me to come to go to Swaziland for an interview before returning to the States.

Our preparation to leave didn't take long: mainly, getting our personal effects ready for shipment, arranging for tickets, and saying goodbye to our friends. A few invited us out to dinner: Sunny Langham and his wife, Mohamed and Creanna Saif, the Benjamins, and Orville Heim who was currently batching it. As for my relationships with the Yemeni, I was especially grateful to have had Saif and Al-Iryani as friends. At a small going-away party at the office, this group gave me the symbolic *jambiyah*.

Epilog

For the longest time I had looked forward to writing about my assignment in Yemen. I had said to myself, "There were so many things I might have done differently that would have made my time there a success." But after studying the considerable material I have kept about this assignment, I have concluded that there was little I could have done that would have changed the outcome. The narrow, aggressive focus of Lukomski and Collom had played a critical role in my failure.

Sunday evening, May 14, 2011, Vicky was watching a late-night program about Anwar al-Awlaki, an al Qaeda leader currently in Yemen, in which she heard that he was born in Las Cruces, NM, received his degree in Civil Engineering at CSU in 1994, and that his father around that time was the Minister of Agriculture in Yemen. The next morning, she asked me who the Minister was who had said "If Araji goes, Shaner goes." Checking, I found that I had recorded the newly appointed Minister's name as Nasr al-Aulaqi. This had to be the same guy! Such differences in spelling occur when going from script to the English alphabet. It's probable that the Core project had funded Awlaki's education. Moreover, I remember having had a pleasant and lengthy meeting with the father when he was President of the University of Sana'a. Recalling this at the time, I thought his appointment as Minister of Agriculture would be positive. Alas, it wasn't, at least not for me.

Swaziland3a 7/27/17 8/7/17

Chapter 15: Swaziland, Part I

Dean Jansma called at the last minute to authorize our trip to Swaziland and to provide the details on what we would be doing and whom we would meet. AID assignments there had been well known as being the best one could hope for, the country beautiful and the people pleasant. While waiting to board our Pakistani Airlines flight from Sana'a to Nairobi we noticed what looked like 200 Chinese laborers also waiting to board a flight. We presumed they were heading back home after an extended stay in Yemen. Earlier we had heard that the Chinese not only funded the construction of major highways in the Yemen, but also did the design, supervised construction, and supplied the equipment and labor. Of course, the road benefitted the country, but its construction offered practically no benefits in terms of technology transfer or job opportunities. As for the "coolies," we had heard that they spent long days on the job and their free time in labor camps near the construction sights.

We arrived in Nairobi late at night, checked into a hotel on the edge of the city, and got up four hours later. When we arrived with our bags at passport control, I gave the porter who had put our bags on the conveyor belt a couple of dollars. The official on duty asked me what I was doing, as though I had done something illegal. I explained as best I could. After some nasty looks on his part he waved us on. Later, Vicky and I reasoned that the hard time he gave us was because we were destined for South Africa. He couldn't have known that this was just a transfer point, that our final destination was the black nation of Swaziland.

We boarded a KLM (one of my favorite airlines) flight for Johannesburg. From there we took Mozambique Airlines to Matsapha airport near Manzini, Swaziland's only international airport. John Fischer, my old friend from Ethiopia, and Charlie Pitts, Penn State's team leader, were there to meet us. John looked the same as ever. Charlie's appearance was appealing—tall, athletic, and handsome with an engaging smile, a tenured entomologist at Penn State. As we

started the short trip to Mbabane, Swaziland's capitol and project headquarters I noticed heavy clouds on the horizon and power lines leaning askance: we were in the midst of the rainy season and a storm had recently passed through the area. About 15 minutes on our journey we passed a sign indicating the turnoff to Malkerns. Charlie almost apologetically, said the research station, where you'll be stationed, is down that road. In other words, "You'll be *in the field*, not at headquarters, which didn't bother Vicky or me a bit.

As it turned out living at Malkerns rather than in Mbabane was a gift! Continuing on to Mbabane we climbed the steep, narrow, and winding two-lane highway that begins about 15 miles short of the capital. In time we were to hear the locals say that this short strip of road could have the most serious accidents per mile than any road in the world. I doubted this, but it makes a good story. Instead of taking Vicky and me to a hotel, Charlie drove us to John's home where we would be staying during our week-long visit. Jean had dinner ready for us. Then, off to bed. It had been a long day. Shades of our arrival in Ethiopia 22 years earlier, when John had met us at the airport, Jean had fixed lunch for our whole family, then looked after the kids while Vicky and I napped.

The next day, Charlie drove us around this quaint, city—more like a town, since the population was only 60,000. The Ministry of Agricultural and Cooperatives was a modest set of two-story of buildings just a few blocks from the shopping center with its small restaurants, coffee shops, boutiques of various types, a travel agency, and a well-stocked supermarket. This is *definitely not like the Africa we have known*, Blantyre excepted. Next, Charlie drove us "down the hill" through Ezulwini Valley with its three tourist hotels that cater mostly to white South Africans who go there to gamble, play golf, swim, or just sun themselves. Not stopping we continued on for another fifteen minutes to the turnoff to Malkerns village. Just short of Malkerns we stop for lunch at a quaint roadside restaurant and gift shop that caters to tourists and the white-Swazi farmers in the area. Peter Thorn, one of the many Europeans, who live in the

area, runs the place. Vicky and I were enchanted by the beauty of the area: lush green hills, fields of pineapple, sugarcane, maize, and turmeric. After lunch, which included wine, we drove the short distance past Malkerns village for a cursory look around the Agricultural Research Station that cover 400 acres. To get there we turn right before reaching Swaziland's Agricultural College, past the prison on our left, through an open gate and down a gravel path lined with jacaranda trees on one side and experimental plots.

The Station's main offices are a rambling set of one story clapboard buildings. Charlie doesn't stop, but drives us up a narrow road between expanses of experimental plots, across a narrow irrigation ditch, and to the camp where we will be staying. The camp contains perhaps 40 farmhouses each set on acre plots. The house Charlie showed us had been occupied by Chris Seubert, Penn State's agronomist who had left a year earlier. Unattended since then the place badly needed paint and repairs. Charlie told us not to be concerned, he would have the place fixed up by the time we returned. Charlie had forgotten to bring the keys to the place so we couldn't go inside. Instead, we looked through the windows at this three-bedroom, one bath house. The livingroom could seat a few guests, the kitchen was "basic," and the dining room was small. The door from the latter led to a covered concrete slab that served as a patio where one could watch the setting sun. On one side of this area was a bougainvillea covered profusely with bright red flowers that overflowed onto the roof. Off-handedly Charlie said a rumor had been floating about that a *boomslang* (a native poisonous snake) resided in the plant. Then, pondering a bit he went on to assured us that he didn't believe the story. A few steps beyond this "patio" was a rondavel about fifteen feet across with a thatch roof badly in need of repair.

In one corner of the yard was a large banyan tree and along the fenced area were several 40' high Ficus. Behind the house was a garden of perhaps 200 square meters that needed clearing. Off in another corner stood a huge mango tree, next to a smaller one of a different

variety. Two tall papaya plants stood right outside the kitchen window, a quince plant was outside one of the bedrooms, grape vines were next to the back fence, a mulberry tree was along another fence, and a lemon tree was choked with clinging vines. Standing in front of our "to be" house, and looking east we can see across the valley to acres upon acres of pineapple fields. To our back was a low range of mountains. Rambling roses adorned the low fence in front next to a gate for a stand-alone garage that was scarcely large enough to let one open the door of one's vehicle. A swinging gate at the end of a path allowed access from the road bordering the north side of the property. The house in back of us was occupied by Neil Patrick, an ag economist from NMSU, whom I had interviewed while staffing our FSR project. The other house was being reserved for an irrigation engineer yet to be identified. Thus, we were not hemmed in by protective walls or fences as in Sana'a. Charlie advised that we needed to hire a day guard, who could serve as gardener, and a couple of night guards.

The next day, which was a Sunday, we rode with John and Jean southwest of Mbabane through rolling hills to the Usutu forest. The Tourist Bureau claims that the 65,000 ha of pine trees there is the largest planted forest in the world. The long, droopy pine needles are unlike those common to the pine. Our short pleasant ride ended at the Foresters Arms, a place run by a husband and wife team of European descent with a quaint restaurant and overnight accommodations for 40. Jean said that this is one of their favorites because of the fine cosine, especially the sumptuous spreads served on Sundays. The place also serves as a convenient retreat offering rental horses, cycling, tennis, squash, croquet, boules, a sauna, golf, and fly fishing, or just a place to relax. The Usutu Golf Club, adjacent to this resort, captured our attention.

Monday morning John took me to the Ministry where he's the senior advisor to the Assistant Permanent Secretary. During our short meeting, John told him that I would be working with Charlie Pitts's team as the research advisor to which he smiles and says, "If John

says it's okay, it's okay with me." The Secretary's response did not surprise me. John had his winning ways, except when he got crosswise with Ernst in Ethiopia. With that out of the way, we went upstairs to Charlie's office where I met Jim Diamond, the project's extension specialist, and their secretary. The other three members of the team (Neil, Broze, and I) were to operate at the Research Station. That done, Charlie takes me there where he introduces me to Chris Nkwanyana, the Station's Chief Engineer. Chris, a black Swazi, is well educated, large, and intelligent. I felt I would be in good hands. Charlie said that Chris would be the one to whom I would be responsible on technical matters. From there went go to a small building of eight offices one of which would be mine. There we met Neil Patrick who had been working there for some time. We both remembered meeting each other in Las Cruces. Aside from his PhD in ag economics, his strong point was his interest and experience in working overseas.

The next day Charlie drove me to the downtown AID office in downtown Mbabane for an 8:00 a.m. meeting with Lili Martella, the Mission's Ag Development Officer. Right off she asks me, "Do you have any *real* ag research experience!" I struggled with that one. Then she fired again, "Could you accept not being team leader?" That was easier to answer. Walking out, I thought the meeting had gone well enough. Interesting that she was the wife of Gene Quennemon the economist member of EWUP. I recalled trading ideas with him about benefit-cost analyses.

In the afternoon I met briefly with Harry Johnson, Deputy AID Director and talked about his design of the Yemeni Core project. Amazing! Then I met Roger Carlson, the AID Director. He said he had heard about my Yemeni experience, and was concerned. He even had called Sherper asking whether I could work with the locals! Otherwise, the interview went well enough. Afterwards, Neil happened to be in town, suggesting we stop for a beer at an old hotel up the street. The place was dark, looking more like a third-class hotel. Still, the tavern allowed us to talk and the beer was good. I think Neil wanted to tell me that the project had lots of problems, even suggesting that I might not want to accept the job.

That evening, Charlie had arranged for Vicky and me to dine with the Diamonds. We had heard about this guy as being "one of a kind," which we found to be true. He was short, broad-chested, sturdy, and bubbling with energy, a guy well suited for extension I thought. When he was asked "How are you?" Invariably his answer was, "If I felt any better I couldn't stand it." He said his reason for saying this was to "put a positive spin on life!"

The following day, Jim took me "into the field" for one of his training session so that I could see him in action. The session came off pretty well. On the way back, before we reached Mbabane, Jim suggested we have lunch at the Mountain Inn restaurant that overlooked Ezulwini Valley. The food and service were good and the view from the hotel was magnificent. Back in the office, I met with Dean Jansma, who had just arrived from the States. He asked what I thought important to include in my contract. Nice approach. That evening he took us all out to dinner at the Royal Swazi Sun, the fanciest of the three resort hotels.

The next morning Vicky and I flew to Johannesburg to begin our trip back home, after just a week in Swaziland. All looked in order for our return for this long-term assignment. I was delighted; Vicky said she was glad too. We had a fueling stop in Mauritius on our way to Hong Kong. We just missed our connection to Bangkok, so spent six hours in the airport. In Bangkok, we checked into the downtown Hilton, which was absolutely gorgeous—especially the gigantic swimming pool. But I got the "fisheye" from the cashier when I presented her with the document giving us the diplomatic discount. So, when I said we would like to stay another day, she said they were booked solid.

¹ Ezulwini Valley featured three first rate tourist hotels, one of which had a gambling casino, swimming pool, a convention center, and an eighteen hole golf course thereby drawing many from South Africa.

In the morning we toured the nearby temples and in the afternoon flew to Phuket, checked into the Thavron Palm Beach Hotel—a lovely, inexpensive place. For a week we strolled up and down the beach, swam, worked at getting a tan, and visited some of the nearby restaurants. The water was crystal clear and the waves gentle, which made for pleasant swimming. One late afternoon on our way back to the hotel, we saw a vendor selling shish kabob, which we tried. A couple of hours later, Vicky had a sever stomachache, which put her out of commission the next day. But she survived and joined me on the beach the following day.

From Hong Kong we flew to Palm Springs where we rented a car and drove to Mike's place. Paul came over and we just hung around for a couple of days. The second day Mike picked up Jaclynn at the spot Marty had chosen. Jackie was now 33 months old having grown so much since we last saw her. After a short four days we flew to Denver then rented a car that we drove to Fort Collins. We immediately checked on Dad at the nursing home where he had been staying. He had injured himself falling out of bed, but was now recovered. So, we took him back to his apartment. The next day Vicky and I checked into the Courtney Park Apartments, corner of Lemay and Harmony, where we would stay for the next six weeks.

During this relaxing period I slept late, going to CSU when it suited me. The order of business was to tie down the contract between CSU and Penn State University for my services. I went over the papers I sent back from Yemen and selected others that I wanted sent to Swaziland. I took the required medical exams, had my teeth checked, and arranged for shipping our personal goods. Then, Vicky and I prepared Dad as best we could for the time we would be away. During spare moments I began reading about the objectives and implementation of the Cropping Systems project as revealed in AID's 1981 Action Memo covering *The cropping Systems Research and Extension Training project in Swaziland*, the Terms of Reference for my assignment, Statistical Procedures for Agricultural Research by Kwanchai and Arturo Gomez, and just for the heck of it Galbraith's Capitalism.

I read the following about Swaziland: It is a small, partially mountainous country surrounded on three sides by South Africa and by Mozambique on the west. It covers only 6,700 square miles, smaller than New Jersey but larger than Connecticut, with a population of a million. It is the only remaining Kingdom in Africa, which was a protectorate of Great Britain from the end WWII until 1968 during the long reign of King Sobhuzo. The two major cities are Mbabane and Manzini each with a populations of around 100,000. The language is SiSwati, with all its clicks, and sounds and a cadence similar to that of Italian. And pleasant mannerisms in the way men grip the wrist of the right hand with the left to show they aren't holding a dagger behind their back, and the way women avert men's eyes during their curtsey.

This is predominantly an agricultural country, 60 percent of which are Swazi Nation Lands. Farm size averages 2.75 ha. While families farming the SNLs do not own them, custom dictates that they have the right of farming them and passing that right on to their children. Most families have some sort of off-farm employment while adhering to the custom that the men return to their homesteads on weekends and holidays to work in the fields, unless they're working in South Africa. Maize is the staple crop, which is grown mainly for family consumption. Forty percent of the families sell none of their output. Farmers inter-crop with beans, groundnuts, sweet potatoes, and edible weeds. Village chiefs preside over local affairs, which include allocating access to irrigation when water is available. Livestock graze communal areas and are given access to the crop stubble.

The summers tend to be hot, never overly so. The winter were free of snow, although, frost sometimes glistens the leaves and grass during the early mornings. No earthquakes, tornadoes, hurricanes, or other natural threats that we heard about. But poisonous snakes,

reckless driving, thievery usually blamed on Mozambicans, and murders by machete causes one to be on-guard. AIDS was beginning to wreak havoc on the country while we were there.

The climate is conducive to rain-fed agriculture during the extended summer growing season on the High and Middle Veld. Large-scale estates occupy much of the Low Veld where cotton, sugar cane, and citrus are grown. Mbabane is located in the High Veld at an elevation of 1,200 meters. Light industry adds to the GNP using mainly inputs from South Africa. Important contributions to the national income result from remissions sent home by males working in the South African mines.

AID's Action Memo of August 1981 began by noting that "Until recently it had been fairly easy to obtain wage employment off-farm, where 70 percent of rural homesteads have absentee workers. However, recently, the economy is producing only 3,500 new jobs each year, while 7,000 new school-leavers are seeking jobs in the modern sector. Consequently, with agriculture so important to the economy and with so many SNL farmers, focusing on this group addresses the jobs question at the same time that it improves the welfare of a large segment of the society. Yet, the Ministry of Agriculture and Cooperatives (MOAC) . . . is presently incapable of translating research findings into a form usable by the extension staff and understandable by small farmers on the scale needed." Past research had been aimed at the modern agricultural sector, a common practice of the time, and now, even the expatriate researchers at the Ministry had been gone for the past two years. Not only were these researchers gone, but the research history at Malkerns, had not been geared to SNL farmers, who inter-crop instead of mono-cropped, and lacked the resources to follow the station's recommendations. history is short, since research at Malkers only began in 1962. "In summary, while some good research has been carried out in the past at Malkerns, two main problems are impeding the effectiveness of the research program in meeting the needs of the SNL farmers: 1) lack of trained

Swazis and 2) the absence of a research approach that addresses the conditions and constraints faced by them."

Continuing, the Research Div of the MOAC established in 1959 wrote that "Research has been carried out mainly on research stations by an expatriate staff for the past several years, and has met the needs of estates and individual tenure farms more than it has the needs of farmers living on and farming small plots on SNLs." Hence, the project objective is to make SNL farming a viable activity thereby increasing the family's income and welfare, as well as being a source of jobs for those entering the workforce. Project implementation is expected to make use of the following approach: A multi-disciplinary team of US advisors will develop its research approach, train on-the-job, and select their Swazi counterparts for academic training in the States. The project will consist of three major components: cropping systems research, agricultural information dissemination, and extension training. The research component, of which I will be a part, involves a systems approach for identifying farm problems based on socio-economic surveys that take into account farmers' cropping patterns, on-farm trials that address the problems and opportunities, and on-station trials in support of these findings. The disciplines considered import, at least at the outset, are crop agronomy, horticulture, pasture management, dryland crop production, soil fertility and chemistry, soil physics, plant pathology, entomology, cotton breeding and entomology, bio-metrics, forestry, and pineapple research.

Further, AID talked about the need for, as well as the complexity of, conducting research that takes the *whole farm* into account. The idea of taking into account so many variables nearly got us into trouble on the FSR project. Luckily, those accepting Hildebrand *inter alia* regarding FSR, allowed us to cut through the complexity that began with problem identification and ended with farmer-managed trials. Our Guidelines had not been published when the writers were

drafting this Cropping Systems Research project. Consequently, I was not awed by the complexity to which the authors were referring.²

And the Contractor, in consultation with the Additional Secretary would select Swazi researchers to fill these positions plus that of the Chief Research Officer and recommend suitable practical training and academic programs. The Consultant's Chief of Party should be a Cropping Systems Research specialist. The incoming team would review past research conducted at the Station and build from there.

On April 27th Vicky and I flew to Detroit where Becky and our new granddaughter, Teresa, met us then drove us to Ann Arbor where David was enrolled in the Master's program in Economic Policy. Three days later we flew to State College, Pennsylvania for two days of meetings with Dean Jansma, his administrative staff, and Doyle Grenoble, the agronomist who had since returned to campus after several years at Malkerns. He and his wife effused about how much they enjoyed living and working in Swaziland—so much so that they planned to return where Doyle planned on working in the private sector. We met Tim in London during a ten-hour layover. From there it was an overnight flight to Johannesburg. The next day we rented a car and made the easy, six-hour drive to Mbabami. After a brief welcome, Charlie drove us to Malkerns, then returned to Mbabane. We soon found the camp aghast over the death of the husband, wife, and child from an auto accident. Apparently, the driver had driven off the side of one of the winding roads and down an embankment. In time, we were to learn how common auto accidents are in Swaziland.

² This research approach was finalized in August 1981; our FSR Guidelines were published in the spring of 1982. The project left out livestock thereby focusing on crops, thus CSR.

I had been on the job only a few days when Chris Nkwanyana told me he wanted me to organize a five day workshop on CSR. Since I was to be the advisor on this approach, Chris thought I should be the guy responsible. He said that I could count on the Penn State advisors and his senior staff, namely Sebe, Paul, and Doug. When I met with these three, they said they would need time to prepare. They proposed waiting until September. I conveyed as much to Chris and he exercised his right as "captain of he ship" by rejecting the delay outrightly. He said if the three didn't want to do it, I should proceed without them. In the end they knuckled under and gave their presentations along with Dick Little, who came up from Big Bend, Charlie, Diamond, Neil, and myself. We included work session for the other research officers and their research assistants, including an evaluation of our presentations. We got off to a rocky start when the assistants, especially, wanted their comments to remain anonymous, to which we eventually agreed. Sebe had to bow out at the last minute because one of her boys was sick; so Dick filled in for her doing an excellent job with little time to preparation. Neil seemed comfortable in his presentation on economics revealing his classroom experience. Diamond performed as one would expect from the extroverted guy he was. Charlie dealt with project objectives, which I found dull. I told about FSR in general and its relevancy for dry-land crops, and the economics of on-farm trials. Upon reviewing the attendees' reaction to my presentation I was surprised by the group's lack of concern over FSR's impact on society. Possibly this is because these researchers, who regularly return to their villages feel they are responding to society's needs. Nkwanyana showed up for the brief opening and closing ceremonies. We ended the week with a brai (barbecue) in our front yard. Charlie brought Kentucky Fried chicken and side orders, which went over like a lead balloon! From the grumbling I learned that a brai means ample servings of meat. Otherwise, all went about as well as could be expected. I heard through Neil that Ngwinana was satisfied, which was a relief. Vicky and I invited Dick Little to stay with us for which he graciously thanked us.

The following week I was an observer at another workshop. This one put on for Malkerns' researcher agronomists by a small team headed by Steve Waddington of CIMMYT's regional office in Bulawayo. These were all-day sessions on the Center's approach to the analysis, interpretation, and reporting of on-farm trials. My reaction, "Boy, these guys know what they're doing!" But then I rationalized, "They should because they've been doing these presentations with support from CIMMYT headquarters for years." Nevertheless, I nearly felt overwhelmed saying to myself, "There's so much about agricultural research that I don't know." Sebe closed out the workshop by lecturing on MSTAT, a statistical package developed by Michigan State Univ for the analysis of agronomic trials. I found her presentations and the respect shown her by the instructors and participants impressive. I looked forward to working with her. Allan Low, a British economist from Bulawayo, stayed on after the workshop closed to visit with Neil. Apparently, he had been to Malkerns before and knew its research program. Eventually we got around to discussing my involvement with the Guidelines. He let the air out of my balloon after realizing that I was the lead author when he went on to say he didn't think we had accomplished much. Well, of course we did. The Guidelines were a training guide for those who didn't know about FSR. It would have benefitted the Penn State gang had it been available when they were here.

With these two workshops out of the way, I was anxiously began reviewing the reports on Malkerns' past research. I felt confident enough about *planning* research programs and *evaluating* research results; and I already had been exposed on the statistical side. Still, I wanted to begin studying the Gomez text as soon as possible. In the process I learned about the analysis of variance, the mainstay for evaluating trial results. I guessed that it would take about six months before I would feel learned enough to interact with the Malkerns team. But, I didn't have to wait long before I could contribute in some ways, e.g., "counts" required transforms" for non-normal distributions; I could advise Leonard Nsibandi, the entomologist, about orthogonal

contrasts; John Pali about the economic implications of his maize trials; and Doug Gama about crops of little value to the economy.

My terms of reference for the 27 months I was to be in Swaziland (ending in August 2001 exactly ten years from the signing of AID's Action Memo) were to work closely with the CRO and his research staff at the Malkerns Research Station, but not to develop an research activities of my own.³ More specifically, I was to 1) work with MOAC officials in preparing, reviewing, and revising the Ministry's three to five-year rolling research plan, 2) within the context of that plan, serve as a resource person to all research scientists as they prepare their annual research programs as regards viable analytical procedures, research trials, analyzing trial results, and writing reports covering findings and recommendations, 3) as needed, provide help in securing the services of specialized consultants by developing the terms of reference, suggesting where they might be found, and evaluating their qualifications for the position, 4) help Swazi scientists reduce the coefficient of variation on their trials to internationally acceptable levels, 5) arrange for suitable training programs for Swazi scientists at the IARCs, 6) help the CRO strengthen ties between other National Agricultural Research Stations, especially those throughout Southern Africa, and 7) other activities necessary in successfully implementing the project. This was a tall order, but one I looked forward to doing, exactly the type of assignment I had wished for. The reason I had worked the grinding hours I did to finish the Guidelines was to have a chance to gain real-time FSR experience in Tanzania. And here that experience literally fell into my lap as result of the Yemen fiasco.

³ The provision that I not conduct research on my own has significance because Penn State advisors had undertaken such research that seemed to benefit themselves, rather than the Swazis.

By the time Vicky and I arrived, the Penn State team had pretty well cleared out. As noted Seubert, the agronomist had left as had the horticulturist and the rural sociologist. The story on the latter was that he had gotten the Swazi to help him collect loads of survey data that he took back to the States so that he could write a refereed journal article. I never tried to confirm this charge against him, but, this is the motivation for some who take foreign assignments. That, and the money.

Pitts, Diamond, Patrick, and Dick Little, the cotton breeder stationed in the Low Veld were all that remained of the team of eight long-term specialists, as well as the short-term ones specialized in mechanization, weed control, ag policy, livestock management, library science, and audio-visuals. Although ten years younger than I, Dick, a Brit, had a wealth of international experience. His dedication to his work and his rigorous discipline in research methodology was an inspiration. Unfortunately, being stationed in the Low Veld meant we only crossed paths occasionally.

Beginning its eighth year, I found little evidence of a CRS approach. It seemed to me that some of these advisors had abused their responsibilities. Pitts seemed more interested in gaining the best exchange rate when converting dollars to *lilangeni*. And I never could understand why Jansma had put an *entomologist* to run a CRS project. Neil Patrick was a first-class goof off. And the sociologist, as noted, used his assignment for his own benefit, not that of the Swazis. By contrast, Diamond, though odd, showed great enthusiasm and knowledge about his job. And Doyle's suggestion that the Swazi horticulturalist experiment with a crop of so little potential revealed incompetence!

In the office assigned to me, I found a snapshot of Dave Redgrave. I had forgotten that he said he was heading for Swaziland, which meant nothing to me at the time. Don Brosz was soon to join our team as the advisor on Irrigation Extension. He and his wife, Pearl, came from

Laramie where he was on the faculty of Wyoming Univ. Don had worked overseas on short-term assignments while Pearl had never strayed far from home. Her mother even feared the two would starve given what she heard about famines in Africa.

Besides Chris Nkwanyana with whom I had the most contact were Sebe Matsebula (biometrician), John Pali-Shikhulu (maize agronomist), Zodwa Mamba and Michael Nxumalo (agronomists), Doug Gama (horticulturist), Millicent Malaza (rural sociologist), Paul Mkhatshwa (range management), Sam Dlamaini (economist), a Gideon Dlamini (documents specialist), and Benedict Bhembe (plant pathologist) as well as their agricultural assistants, and the assistants who resided in each of the eight Rural Development Areas (RDAs). I became friends with Mbuso Hslope, one of these assistants whose office was across the hall from mine. Just short of thirty he was handsome with a light brown skin color, lean, strong, and friendly. Before long he told me, "I like you too much, which meant you're okay. Mbuso was a ready source of information about the project's past activities and SNL agriculture. I once stupidly asked him whether or not the mechanic at the filling station just down the road would be able to fix my lawn mower. He just looked at me blankly then said he didn't know,. He had never had an occasion to go there. He didn't own a car.

It wasn't long before we began reading and hearing about witchcraft. The word *muti* came up frequently. One had to be careful not to leave any body parts "lying" around, i.e, pieces of hair, fingernail clippings, drops of blood, that sort of thing. *Anything* that came from the body would serve as *muti*. Once these were in the hands of a "witch" she could cast a spell on you without you suspecting it. Swazi friends of Charlie and his wife Carol invited them to a ceremony in which candidates for witchcraft must prove their witching abilities by "sniffing" the ground to detect their enemies. Even Members of Parliament paid their respect to this group. In the Times of Swaziland, July 1, 1989, Members of Parliament were quoted as saying they

did not believe in witchcraft, but did not want to pass legislation outlawing the practice, *just in* case there might be something to it!

For some reason Charlie threw a party at the Continental, a small coffee and sandwich shop in the shopping mall near his office. This was a place where he and Diamond frequented on their coffee break. Charlie had invited Vicky, me, and the Malkerns crew to participate in some sort of celebration. As the night wore on, the small combo playing there heated it up, and before long most of us were dancing on the small floor in front of the band, when suddenly Michael Nxumalo,⁴ a sturdy young man and a recent arrival from graduate study abroad, jumped into the center of the dance floor and began the typical Swazi war dance. With flaying arms, he proceeded to stomp on the ground by bringing his knees chest high then bringing them down heavily on the floor. Soon, he had worked up such a sweat that he had to sit down to catch his breadth. Vicky and I had never seen such dancing before.

When I needed to have the engine on our lawn mower repaired I asked around about a nearby repair shop and was told about the garage attached to the filling station a quarter of a mile from the main entrance to the research station. Without giving it much thought, I asked Mbuso Hlope (pronounced *Shlope*), the agricultural research technician just across the hall, "Have you ever used the mechanic at the garage around the corner form the experiment station?" Somewhat taken aback, he said, "Why would I do that?" He doesn't have a car, is unlikely to have one, nor any of his friends. The amazement came from the fact that he didn't have a motorized vehicle now, not in the past, nor unlikely to ever have one. Ownership of a vehicle so common to us in the industrialized world had not penetrated to this level of employee in this

⁴ the Nx comes off with the Southern African "click," which I learned, rightly or not, by forcing my tongue to the top of my palate and pulling my tongue down while forming the N sound; it worked for me, but I never sought comment from the Swazis.

part of Africa, even though Mbuso had received two years of technical education beyond the secondary level. Having noted this wide gap in cultures and living standards, it was surprising to find that the Station's assistant farm manager (an important position for the smooth performance of the station) had attended a summer course at CSU!

Enid Pali, John's wife, was our project's secretary at Malkerns. For some reason Charlie thought she was inefficient and was planning on canning her. But I found her likable and efficient, so was able to keep her with us. One afternoon while Enid and I had remained in the office after hours, her twelve-year old niece came into the office, took one look at me, pointed her finger at me and giggled, "Ha, ha, white man!"

To give some life to these names: Sebe was a marvelous woman of 35 or so, a single mother of two. The custom is for the woman to prove her fertility before marriage; and some of the better educated ones prefer to stay single. She was crippled by polio during early childhood. As a result she must use dual crutches to get along. I've never heard her complain. She has become so proficient in her field of biometrics that CIMMYT and other agricultural organizations use her as a trainer on MTSAT --a statistical package developed by Michigan State University for the analysis of agronomic trials. She has been Swaziland's representative to worldwide gatherings of handicapped women. She is a sponsor of a major orphanage in the area, on a Government welfare committee, and representative to Beijing regarding some Women's movement.. For years her father was the private secretary to King Sobhuza II.

I had heard that John Pali could be difficult, which I found not to be the case. John was a black heavyset Ugandan standing 5' 10" with dark eyes and typical Negroid features including an ample stomach that could have been the result of his fondness for beer, meat, and *mealies*—a soft cornmeal mush that is the country's staple. John and his wife, Enid, had been in Swaziland for years. I never knew why they settled here. But I found John to be a first-rate researcher specializing in maize varieties, passionate about his work, and a great motivational speaker.

Neal Patrick filled me in on Zodwa Mamba saying that she was a good agronomist researcher, but shy and hesitant about her abilities. She, like Sebe, was a single mom with two children. In time Zodwa became the team leader of our small team of FSR researchers. I found her easy to like and not as shy as Neil had portrayed her to be.

Doug Gama was the Station's horticulturist who had studied at Penn State. He lived two doors down from us. Doug was a pleasant, mild-manner guy who took his work seriously. Following the recommendations of Doyle Grenoble he had encouraged a few Swazi women to plant half of their limited irrigated plots in broccoli, which amounted to about an acre. When I visited their plots, I found the crop to be flourishing. The problem: Where to sell it? When the women went with their harvest to the government-funded distribution center, the managers said they wouldn't accept it. Who in Swaziland knew anything about broccoli? Recognizing Doug's problem, Vicky and I went searching the supermarkets and up-scale restaurants as places where the crop could be sold. Luckily we were able to find a market for these women's small plots of broccoli. Lesson: don't do research on a crop with such a limited market. Other crops that Doug had been researching were strawberries and sweet corn, which the Swazi don't eat! This problem was one I could easily address. In an illustrative exercise I was able to show that the total demand for *strawberries could be met by a single acre of land*. Now, what type of research program would focus on a crop of so little significance? Just as bad, Doyle's selection of these crops suggested that he had acted alone; certainly not in concert with other members of a CRS team. Where were the other specialist?

Millicent, the rural sociologist with a PhD from the Penn State was a character. While in the States she had gotten close to her Malkerns counterpart—and might have even married him. Self-assured, pretty, and prone to spout off, she once challenged the allocation of Malkens capital expenditures for men's outhouses. She said in one of our Monday morning meetings, "Why do

you need to waste money that way instead of spending money on outhouses for us women? All you men need to do when you have to go is to point it this way or that way!" Having associated with Penn State's sociologist who had collected data for his own purposes back home rather than for the benefit of Swaziland, I wondered why she accused me of not having my own research program, and passing her thoughts onto AID. The result was that Sharma, AID's manager of our project got back to me wanting a calendar of what I would be doing each day for the next two months. (Where do they get these guys?) Thinking this to be a ridiculous request I ignored it, which put Charlie on the spot. After awhile Charlie said that if I didn't comply he might have to send me home. So, I got myself in trouble again with those above me, but not seriously. Meanwhile, I began a series of seminars on CSR for the ROs. I even invited Sharma and others at AID/Mbabane to come join in. One from AID did show up once, but it wasn't Sharma, and that was the end of it

Paul Mkhatshwa, the range management and livestock specialist became Acting CRO when Chris Nkwanyana left to accept an important position with the Southern African Research Center. When Chris made the announcement, I thought, "This ought to be interesting. because Paul was such a quiet unassuming guy. Still, he listened carefully and was a good scientist, which could make him an effective leader. He treated me more as a fellow team member rather than as the research advisor who reported to him. By that time, I had already begun implementing a CSR approach—first by a series of seminars then several *sondeos*. Paul attended these seminars and surveys.

⁵ Interestingly, I had met Sharma in Honduras when Merle Neihaus and I were evaluating NMSU's FSR project there. Sharma had been freelancing for AID at the time. He hadn't impressed me then and he still didn't in his role as AID's manager for our project.

I had minimal association with the others: Sam Dlamini, who had returned with a graduate degree in economics about midway through my stay, was one of them. As an agricultural economist his major contact was with Neil Patrick. I found Gideon Dlamini, the Research Officer in charge of records, with whom I meet occasionally friendly and easy to talk with. One day, he showed up dressed in a short skirt, an animal skin over his shoulder, what looked like the rim of a small bicycle around his waist, a red feathers in his hair, and carrying a knobkerry. The regalia meant that he was a chief; the feather meant he was a Dlamini and therefore part of royalty. Each village, or group of villages, has its own chief. And he was one of them. Modest about his position, he had never revealed his exalted status to me. Finally, my only contact with the plant pathologist was to advise him on research design.

Only occasionally did I have professional contact with the members of our Penn State group. Twice Charlie called us together to propose an annual work plan. Had our CSR team gotten further along, I could have had reason to involve Jim Diamond because of his expertise in Extension. But I had enough just focusing on research. Chris had put me on the Station's publications review committee: a small but important panel along with three Swazi researchers to decide Malkerns research reports merited publication. In this capacity, I had occasion to review two papers that Neil wanted published. Don Brosz's Extension work with that organization in Manzini overlapped little with what our CSR team was doing. Just as with Diamond, had time allowed our CSR team might have expanded is scope beyond research on dryland crops. But we never got there. My association with Neil and Don were frequent off the job, since the Brozes and Neil were our neighbors. Neil had married an African from Gambia when he worked on a CID project there. But, she had returned to Iowa to stay with Neil's family, and Neil was batching it. So, that's our team—Penn State advisors and our counterparts. Now, to tell more about what I did on the project; and later, what Vicky and I did beyond the project.

Early in the mornings outside my office window, I would hear in a pleasant sing-song cadence and inflection that sounded Italian, but was not. It was the Swazi greeting, *sabona* (Hello), then *enjane* (I see you) followed by *enkona* (I see you too)—something like that. I never learned *SiSwati*, which was a pity. Monday mornings the research officers (RO s), research assistants (RA s), research recorders, and lab assistants met for about an hour to report on their plans for the coming week. Chris often chaired these meetings. Once a month the RA s came in from the field to report on their activities, which increased the number present from about 25 to over 30. Until Don Brosz joined us Neil and I were the only two white faces present. Yet, we both felt comfortable in this setting. Looking around the room I was charmed by the different ways the women prepared their hair that including tight braids and bright-colored ribbons.

My review of past research allowed me to identify the ARD's major research programs as being Animal Nutrition and Range Management, Biometry, Cereals (mainly maize and sorghum), Cotton Breeding and Entomology, Horticulture, Legumes (mainly beans, groundnuts, cowpeas, and jugo beans, which is an African peanut), Pastures in the Low Veld, Plant Pathology, Socioeconomics, and Tobacco. *And preciously little on Cropping Systems Research*! The bulk of the research were along traditional disciplinary lines, except for help in biomtry when evaluating research results and socioeconomics when evaluation the potential impact of successful results for participating farmers. Inputs from Neil on economics or Millicent on sociology were primarily after the fact, not in problem identification or research design.

Malkerns did have on-farm trials. But the distinguishing factor these trials was that they were on the farmers' fields for the primary purpose of finding out how some variety or farming practice performed under this environment, not how the introduced changes took into account farmer needs, interests, or capabilities. In one example, Pali had introduced a maize variety in which the farmer had *no interest*. He wouldn't grow that crop because his family didn't like the

taste, it took too long to mature, or for some other reason. John explained that he wanted to learn how the variety performed over a spread of climatic and soil conditions. He admitted that his *interest was in the crop, not that of the farmer*. When I pointed this difference to John his eyes lighted up, as though he, and the others, had not thought about such things. *And yet this was supposed to be a CSR project*! Thus, I had a lot of changes to implement: attempting to change the mentality of the organization. One of the stickiest points turned out to be the researcher-extension nexus, which was not understood even though one of my seminars had focused on the concept.

The project's best accomplishments, to my way of thinking, were Sebe Matsebula's work in biometrics. Dick Little's cotton breeding at Big Bend in the Low Veld, and John Pali's work with maize varieties. Sebe's association with CIMMYT's regional program out of Buluwayu lent prestige to Malkerns. Little's cotton research was a carryover from earlier work on cotton, which had little of interest from most SNL farmers. So, there was a reason for Dick's focus of attention. John's situation was entirely different because maize is *the staple* for the country, and one grown by essentially all SNL farmers. If anything was to be done in a CSR manner, maize had to be the core crop around which other crops and activities with be built. And, as stated above, John's work was superb. But it wasn't CSR! Even when John conducted on-farm trials, the focus was *on how the plant performed under farmers' conditions*—the quality of the soil, the availability of the farmers' resources, and his practices. The trial considered either the farmers' interests or how the variety fit into the farmers' cropping systems. In one of John's trials, the participating farmers would not accept the variety Pali was testing simply because the family did not like its taste. The farmers had participated because of the incentives John was able to offer.

Eventually, I gained the confidence of the most senior and capable research officer, such as Pali, responded to Chris's requests that I prepare papers on a variety of topics, and write terms of reference for short-term consultants. Once these were out of the way, I was ready to have a

small group of us begin several *sondeos* that were to be the predecessor to CSR design and implementation. Even after eight years the Penn State team had never gotten around to anything even closely resembling an FSR approach. Made me wonder, "What were these guys doing during the eight years before my arrival, given the implementation approach laid out in the AID contract and the initial team leader supposedly being an FSR specialist? The Station's good research programs were in maize varieties, cotton breeding, and biometrics. In reviewing past reports I learned a lot. While they provided ample information on "traditional" research activities, they showed precious little that one could call *cropping systems* research!

I wrote about the need for closer links between the Malkerns' ROs and Extension's Subject Matter Specialists. The qualifications of the ROs and SMSs are often similar and their interests on topics such as maize varieties, soils, and entomology, with the specialists aiding in identifying research needs then distributing research results to the farming community; suggested alternative procedures for mean-separation in maize variety trials; worked with the biometrician on ways to gain panel uniformity on its research station, experimental farm, and experimental plots; reviewed a paper on the effectiveness of lime applications on maize yields; concluded that the Univ of Florida's statistical package for hand-held calculators was outdated and too complicated for our use; assisted the livestock nutritionist in designing a feeding trial for the coming season; and so on. Just a lot of detailed, technical stuff, often unrelated to CSR. In the process, I gained an understanding of the Station's activities while the RO s got to understand me.

Among my more important tasks were three requests from Chris. One was a 25-page paper I wrote on a Reorganization and Staffing of ARD in response to Principal Agricultural Secretary's request. Given complete freedom in how I should respond, I came up with a three-phased proposal that employed a research strategy that adheres to Government and MOAC objectives. The strategy combines a cropping systems approach aimed at SNL farmers with a

fundamental research approach that benefits Title-Deed Lands as well. To implement the strategy, ARD requires additional stations and field staff, must increase on-farm activities, and forge closer links between on-farm and on-station research and between research and extension. This was an adaptation of the FSR approach to Swaziland's CSR.

The other two assignments were 20 page reports that contained my thoughts on ways to implement a Three-Year Rolling plan for the ARD. My report reviewed existing procedures whereby each RO proposed his or her research program for the coming year. I then suggesting that the CRO present an overall research strategy geared to the country's agricultural needs followed by how each research proposal fits within that strategy. From there, I outlined the basics of the technical and socioeconomic justification. ROs, with minor exceptions, were well versed on the technical side whereas they had paid little attention to the potential socioeconomic impact when their research proved favorable. For this part, I expanded on the economic and financial analyses I had developed at CSU and helped implement elsewhere.

I found Chris good to work with, at least before I fouled up our relationship. He took me to a ceremony by King Mswati III. In his early 20s and just beginning to accumulate wives. Tall and well built, he walked with the confidence of a king. Reminded me of pictures I had seen of Mohammed Ali in his prime. Another time, I rode with him in his black Mercedes to visit the sugar plantation at Simunye in the Low Veld, near the Mozambique border. Once there, Greg Gildard, the Station Manager, gave us a tour that included their new drip irrigation system and a the Mananga Training Center. A nice show, which revealed the close contact the European Gildard had with Chris and how research at Malkerns had benefitted the plantation. On the way back the news came out that De Klerk had freed Nelson Mandela from his 27 years imprisonment. Chris broke into a big smile followed by a hearty whoop of approval.

Then I screwed up! About this time Chris Nkwanyana and Charlie were talking about having a field day in which Ministry officials, AID, and others would come to Malkerns and be shown what the CSR project had accomplished. Dismayed by the idea because the only innovation I had come across was a rather minor one dealing with a seed planter; and that was only being used by a few of the more well-off households. Without thinking of the consequences I wrote a memo to Charlie, copy to the CRO, saying I thought this a poor idea and gave the reason why. Chris took umbrage at what I had written. Our relationship stayed fouled, but not for long. Soon, Chris would leave for Gaborone where he became the Principal Program Officer for the Southern African Centre for Cooperation in Agricultural Research.

It had taken me a long time to review what the project had accomplished during the eight years before my arrival and to learn enough about formal experimental research to be of use to the ROs. Meanwhile, Millicent told AID that I wasn't doing anything. But my terms of reference *specifically stated that I was not to do my own research*, as those from Penn State who had done research for their own benefit, rather than for those at Malkers. So, did I have any success? I considered John Pali's coming to me for help *a great success*. Then, the seminars on FSR that were to come I thought helpful. Even so, Sharma wanted a day-by-day account of what I would be doing over the next two months. I rejected this request as idiotic. Even so, Charlie threatened me saying that unless I complied with this directive, he would be forced to send me home!

Putting the above behind me, I now was ready to learn more about Malkerns' off-station activities where the eight RAs spent most of their time within the Agricultural Research Districts.

⁶ My terms of reference even said that I should not engage in research on my own. That directive suited me fine because it was in line with what I wanted to do. Besides, it fitted my idea of the researcher's rôle, as by General Scowcroft was to say "A successful adviser doesn't play one of the instruments, he conducts the orchestra."

I asked Mbuso to arrange these meetings and to accompany me on my day-long trips. Because Swaziland is such a small country trips to even the most distant Districts did not take long. For one of these trips Vicky fixed tuna fish sandwiches for both of us. Sandwiches are not common fare among the Swazi, but Mbuso said he like his.

Each of our eight meetings was different. At one of these we met the RA who was a female and her associate from Extension to talk about their joint programs. They informed me that farmers would not use pesticides even if they could afford them because farmers consumed many of the weeds that grew among the crops; and that most farmers found cash so scarce that they wouldn't consider spending it on fertilizers, even if we could show them the advantage of doing so. In another district where farmers were not so cash restricted, we talked about the farmers not being able to get their fields plowed in time for planting. Subsequently, I found a research report that showed delays in optimal planting dates lead to lower yields. One of the RA s complained about not having transportation. His motor bike had broken down and he hadn't been able to get it fixed. Now, he had to move around the district riding on buses that routinely pass through his area, then walking sometimes long distances to meet with those farmers on who participating in Malkerns field trials. The trip that stood out most in my memory was the one to the Low Veld where the RA there showed me his contact farmer's cotton fields. Walking through one of the fields he demonstrate his adroitness in picking cotton, something I had never seen close up. From there we visited one of his contact farmers, who invited us to sit down in the shade of a Marula tree. A couple of other farmers joined us while the RA explained the purpose of our visit. Exhibiting customary hospitality, the host offered us a drink from the large rain barrel next to us. The farmer dipped out a cup full from the barrel and passed it to the RA, who

in turn offered it to the others and finally to me. The fermented Marula berry is considered a potent brew, which I felt obliged to accept. After we left I said to the RA, "I noted you didn't take a drink." to which he replied, "Oh no, I never drink the stuff because it always makes me

sick!" I didn't hold it against him; and fortunately, it didn't make me sick or intoxicated.

At another location the RA took us to visit of one of his contact farmers. The male was not present but the wife invited us into their compound that was surrounded by a crude fence made of small tree limbs and branches. The grounds inside were bare earth—swept clean with a broom made of straw. The rondavel was made of the same material and plastered with mud. At the beginning and into our discussion the young woman would occasionally bend over, stiff-legged and touch the ground with both hands. Wondering about her actions Mbuso explained that her actions were an expression of respect.

It was during these trips that I developed the custom of never locking the *baki*⁷ from inside the cab. Of course, breaking a window to solve the problem would not have been all that drastic. Except for the Low Veld, our travels did not take us to remote areas. The main road were well asphalt and the spurs from them well tended gravel. Along the way we would occasionally come across well-dress youngsters in uniforms on their way to school. Walking in small groups, they seemed carefree and enjoying themselves. I never asked the distances they would be walking.

Using our findings from these visits I prepared a list of problems I thought the ROs ought to know. Then I sought their ideas on how to respond. The RAs needed 1) advice on the layouts of the plots on farmers' fields, 2) they revealed that farmers often allocated their poorer plots for the trials, which biases the trials and the late arrival of inputs from Malkerns, weak coordination from their Extension counterparts, uncooperative farmers, and the lack of adequate transportation. While generally giving vent to their problems and frustrations, most were happy to be associated with MOAC. Besides these reactions of the RA s I also was able to see for

⁷ South African term for a pickup.

myself the universal reliance of maize as the country's primary staple. But also noted the widespread inter-cropping of legumes, mainly beans, groundnuts, cowpeas and jugo beans.

By now, I had reviewed most of the Station's research papers over the past few years and thought I would cull from those dealing with legumes. My purpose was to illustrate the value of a literature search before beginning the *sondeos*. In a 30-page report that I used as the basis for a seminar I was able to show for the past eight years the proportion of legumes, i.e., beans, groundnuts, cowpea, and jugo beans, grown by region, the area planted, yields, and relative profitability. I used this report and seminar as an introduction to the research approach I planned introducing to the ROs.

While I felt that I was getting along well enough with my Malkerns colleagues, except for the single miscue with the CRO, my association with Charlie Pitts took a turn for the worse. And it was my intention to do so. This resulted from his approach to ARD's research program for the coming year. To get things going, Charlie got Diamond, Neil, Don, and me together for a working lunch at the popular Mountain Inn restaurant. Seated in the midst of a fairly large crowd, we didn't get much done. Charlie followed up in a few days later by inviting us for dinner at his home in Mbabane followed by a further discussion of our research plan. He began the working session by asking each of us what we thought should be included in the plan. I kept thinking, "Shouldn't Chris and the other RO s be involved, even someone from the MOAC?" But Charlie said just give me your ideas. They will accept whatever we put down. This reminded me of my dissatisfaction with Ray Solem in Honduras.

The next day, I told Chris about our planning session. Chris said he hadn't heard about the meeting; but didn't seem concerned. He said he had other things going on and wouldn't have attended had he been invited. A few days later, Charlie called our small group to Mbabane to finalize the plan. Only Doug Gama was there from Malkerns and *no one* from the MOAC.

Guess Charlie knew what he was doing by going ahead without involving from the Swazis. However, this did not imply that Chris and the RO s had no plans for the coming season. Their plans would depend on the results of their completed trials, as well as other research trials that might be relevant. I was sure that Dick Little would be planning ahead. And I had seen nothing to suggest the other RO s would not be doing the same. It was the disconnect between AID and Swazi planning that bothered me.

Be that as it may, it was Charlie not caring what we produced that caused me to lose respect for him. I began noticing how often when meeting with him in Mbabane, we would break for mid-morning coffee apparently more interested in converting dollars to lempira at the most favorable rate than anything to do with our project. Made me wonder, "Why did he come to Swaziland?" Why had Jansma send an *entomologist* to head up a CRS project? And why had AID accepted? Of course, Charlie maintained good relations with MOAC and USAID, which was worthwhile. Still, I was disappointed by his indifference to the project.

Eventually Sebe, Pali, and Dick began asking me about the Guidelines. Having waited for this show of interest, rather than trying to force my ideas on them, I planned a series of seminars on the subject. I prepared a list of topics for a series of seminars that I gave to the RO s asking them to rank them according to their interest. Tops on the list were Farmer-Adoption of Research Results, Setting Non-experimental Variables, Integrating On-Farm and On-Station Research, Across-site Stability, An Expanded Research Program, and Statistical Issues. At the bottom of the list were Farmer Selection and Interdisciplinary Teamwork. Most of the RO s attended, including Paul, who was now Acting CRO, Charlie, Diamond, Neil, and Broze came once or twice, and Sharma's representative came once. I was especially glad that the latter showed up because I wanted to counter the impression at AID that I hadn't been doing anything.

By mid-April, 1990 I had given five seminars, which were beginning to give the ROs a reasonable picture of the principles of FSR, which in turn applied to CSR with little alteration. I was waiting for someone to take the initiative to begin applying the approach to one of the research programs. Then Sam Dlamini, the economist, suggested that they begin making field visits. Two weeks earlier, I had presented my report on legumes as an example of a literature search before heading to the field.

Before long the group decided that we should do a *sondeo* focusing on legumes reasoning this to be the most important crop next to maize. I group chose Zodwa, as their team leader despite Neil Patrick having told me about her shyness. Over the next three weeks our interdisciplinary group of eight, including Paul, crowded ourselves in an old combi van and set off to visit one of the seven rural agricultural areas) scattered throughout the country. The names of the locations we visited were exotic: Mahlangatsha, Matjane, Modulini, Mpolonjani, Nkambeni, Sitobela, and Tikuba.

Along the way to one of our destinations, we would pick up one of the regional Extension Agents who would direct us to some of the farmers who had participated in the Station's on-farm experiments. In all of the cases we ended up talking with women, since the male heads-of-the-household were often working off-farm once the crops were harvested. One of he women was keen on the topic of beans and groundnuts, since her family relied on them to provide much of its cash income. At another site, we sat with a middle-age lady on benches under a huge shade tree and got to know about her family, labor shortages, and how legumes fit into their cropping patterns. At another site an elderly lady showed her meager maize crop that was suffering for lack of moisture and poor soil. At one site the women and her children were in the field hacking down maize stalks. Not wanting to inconvenience her, Nxumalo took the machete from her hand and continued the job giving the woman a chance to rest while talking with us. All of our party felt comfortable in the field, because as already stated it is their custom

to return to their villages on weekends and holidays so that they can work on their land. It's a good system they have, given that most have political representation through their village chiefs.

On one of our trips Khanyisile Mabuza who was headquartered in Mbabane and was filling in as our sociologist, chastised me for going into a farmer's bean field. We had been waiting for some time for the arrival of our local contact and I thought I would do something rather than just sitting and waiting. I was interested in looking at plant spacing, the number of pods on the plant, and the health of the plant. Just to learn more about one of this particular crop. Innocent enough, I thought. But she said that the owner of the plot would wonder why someone would be in his bean field . . . and be offended. She was probably right; and, although, I was supposedly the foreign "expert" I felt embarrassed. At one of the sites, we were told that the lady we had asked about was in her maize field cutting stalks that would be used for fodder. When we contacted her, she stopped her work and began answering our questions. Again, Nxumalo politely took the machete from her and began cutting the stalks where she had left off. Such sensitivity to the person we were interviewing impressed me but was accepted by the others as normal courtesy. At another site our host told of a Chinese project in their area. The Chinese were trying to demonstrate how high maize yields might be with improve practices including greater amounts of fertilizers and pesticides. To our way of thinking, they were wasting their time. The RO s knew how to increase maize yields. But the question is how to do so under the average farmers' constraints, which include not only enough cash for purchasing inputs but the availability of traction for land preparation and the necessary abor during critical periods. On our way back from Tikuba in the Piedmont on the eastern edge of the country boarding Mozambique, we stopped at the side of the road to buy several *cobs* being roasted over a charcoal grill. When offered one, I hesitantly accepted it because this was field corn not sweet corn. But, to my surprise I found it delicious. Since maize is the country's staple, undoubtedly farmers choose a variety with good taste. I was learning all the time!

Typically on the hour or so drive back home from these visits, the team relaxed and began lively discussions filled with jokes and laughter. Much of the talk was in *Siswati* but occasionally they would switch to English, which comes easy to them, to let me in on their conversation. Many of their jokes are rather "earthy," not unnecessarily crude and is common among those who grow up in farming communities. What struck me most was the congeniality of the group and how they had received Paul, the acting CRO as being simply one of them.

With our field work done the team agreed that Zodwa as team leader ought to write up our country-wide findings on legume production in the country that would lead to future research. To help her think though what should be in the report and the emphasis on important elements of it, we got our group together for a "brainstorming" session. The team took to the idea. Next, Zodwa and I worked on the outline for the report, and when finished she asked me to edit it. I felt we were making progress, and was happy with our accomplishments.

While we were making progress in implementing an CSR approach, I had been paying little attention to what was doing on in Mbabane—with Charlie, AID, or the MOAC. Then, one day late in September Sharma began bugging me, wanting to know about the seminars on CSR that I had promised to give and my contractual obligation on the three-year rolling plan. Once I began giving the seminars he wanted me to have those attending them evaluate my performance and send him the results. Which I refused saying the RO s were a mature group, we had a good working relationship, and that if they didn't like what I was doing they would have told me so. I told him and Charlie that I thought his request sophomoric. Later, Charlie passed on to me Sharma's demand that I send him my plans for each day over the next two months. Thinking this request uncalled for I refused that as well. In any case, I wasn't making any points with AID/Mbabane or Charlie, but I didn't care. I was getting along well in Malkerns without input from these two. Besides, professionally, I had become disappointed with them both. Guess I hadn't learned anything in Yemen. I was still unwilling to play the political game.

By May the situation had gotten so bad that Charlie told me that if I didn't produce something soon on the Three-Year Rolling Plan he would "blackball me in the States and internationally and send me home if I didn't respond to his wishes." That threat caught my attention. So I went back over my contract and found that the First Requirement in my Terms of Reference read "Working with MOAC officials in preparing and revising the MOAC's 3 to 5 year rolling plans." That caught my attention, so I began in earnest spending half of the next sixteen days in writing the report. The report, which I handed to Paul on June 24, covered the following topics: the current situation, proposals in place (strategic plan and reorganization plan), elements of planning (broad justification, socioeconomic justification, and technical justification), and suggested changes). Paul's response? He said he was happy with what I had written, but wanted me to hold off until the International Service for National Agricultural Research team arrived in October. I said that with ISNAR's worldwide reputation and the talented team that would soon arrive, anything that I might try to implement would be both naive and superfluous. Neither Sharma nor Charlie had anything to say, which was the end of this issue.

However, I wasn't done with the issue. In my End-of-Tour report about my responsibilities for "planning" under my Terms-of-Reference, I wrote:

This requirement is a misconception. The Government has shifted from a five-year development plan (not rolling) to a three-year capital budgeting plan. And ARD's capital budgeting requirements are minimal, amounting to only the equivalent of \$82,000. The CRO is built into this process through the quarterly budgeting meetings chaired by the Economics Planning and Analysis Section. Given ARD's minimal capital expenditures and the absence within the Ministry of any effort at multi-year planning of recurrent expenditures, this requirement that I become involved in any three-year rolling plan has no relevance.

What I did do instead was 1) develop guidelines—the RO s might use in preparing their research proposals for the coming year, 2) devoted 13 seminar-hours on research strategy and planning suitable for ARD, 3) participated in a regional workshop involving ISNAR on long-range, national planning on agricultural research, 4) with ISNAR's help I wrote a report on behalf of the Luyengo ARD to be used for its planning activity, and 5) developed a framework for a three-year rolling plan for ARD that would help improve immediately its research program and, later, should a national planning effort materialize.

With that, I considered my contractual obligation had been met. I concluded that Sharma and Charlie were more interested in "covering themselves" contractually, than in any meaningful use of the result. It surprised me that neither knew or had considered ISNAR's pending visit.

Once again, Charlie and I were at odds: this time over the End-Project-Report. He wanted to sluff it off as just another quarterly report, whereas I thought the final report ought to be taken more seriously—if not like our our agro-industry study, which ran 370 pages, at least a summing up and analysis of what had been accomplished over ten years and the directions for future research. In the end, I wrote a 24 page report that included references to the memos and papers I had written, and seminars I had given. Besides considering this a minimum on my part, I wanted to show my productivity, especially given the notion by Sharma and Millicent that I hadn't done much while here. This ticked Charlie off; but by now I didn't care. But it did make me look inward to see if I weren't becoming too testy and unnecessarily rebellious against authority. Or, in my defense, it could be that after having worked with those truly gifted and dedicated, that I had grown less accepting of those who, in my opinion, fell short.

One of my last activities in Malkerns was to take my turn for weekend duty. Mine had occurred for the first time in mid-June. I arose at 4:00 a.m., checked out the milk barn, recorded the daily take, and "walked" the width and breadth of the station. Frost was on the grass when I began, the air was still, and al was quiet, quiet, quiet. For the first time I saw sections of the station, such as an area set off for tree experiments. I watched the sun rise and cast its shadows. By the time I finished some three hours later, it had warmed up and the frost was gone. Such a peaceful, pleasant experience; and all in the line of duty.

A curious thing happened in June. While I was in the midst of my disagreements with Sharma and Charlie, AID had called in a De Vries team to evaluate the Penn State contract. That this evaluation came close to the time the Penn State contract was to end was not the curious part. What was curious was that Jerry Eckert was Devrie's team leader. That Jerry was involved should not surprised me, since he had spent years in Southern Africa and had recently been on the Faculty of Economics at Stellenbosch Univ and had even bought a house.

Jerry and I, along with one of the team members, had met over coffee in Mbabane; I attended one of their meetings at AID; and Vicky and I invited Jerry and a friend out for lunch. During the meal he expanded eloquently on the upcoming election: how he had it all sized up and how Mongosuthu Buthelezi of KwaZulu would replace De Klerk in the upcoming election rather than Mandela.

In the midst of this diversion I began looking into the possibility of remaining at Malkerns once the Penn State contract ended in August. Vicky had agreed. There was so much progress, I thought I had made implementing a CSR approach that I wanted to continue. After all, this was the type of work I had aspired to doing once we had finished the Guidelines. So, by

⁸ Earlier, he had worked on a CID project in Lesotho, overlapping with Becky while she was there. The two of them had became friends, nothing more, as far as Vicky and I knew.

the middle of May I began probing the idea with John Pali, Paul, and Doug Gama about staying on. They thought it was a good idea. John went on to say that he would see what he could do. During one of our regular Monday morning meetings Paul talked about the upcoming arrival of the ISNAR team in October to review ARD's activities and recommend how they might be improved. Off to one side he said he expected me to still be around to participate.

In early June I met with the Committee on Research Strategy that Paul had set up. The members included me in the forthcoming program for the next six months and asked me to prepare a memo for Buckham, the Principal Secretary for Agriculture, that I remain for at least this long. When I handed the draft memo to Paul, he wondered why I had not asked for an 18-months extension. The next day he suggested the period be for two years, saying he would speak to Buckham the first of next week. His idea of approaching Buckham on my behalf could have been dead on arrival. At one of our meetings involving the Ministry I happened to sit next to Buckham. During a break in the presentations he told me he didn't think much of my suggestion that promotions and pay raises with his Ministry be based on performance rather than the amount of time working for the government. He said that my idea went against Swazi tradition, which was probably true. This idea of mine had come to his attention as a result of a paper on reorganization of research at Malkerns. That was one of my ideas for attracting new talent and holding onto existing talent. Taylor would probably have supported my suggestion; but what I proposed was counter to the Ministry's traditional ways. Despite this encounter, even as late as the first of July John told me that the De Vries report had recommended my continued stay as "part of AID maintenance" following the Penn State team's departure. And our sondeo team was on my side. In one of our discussion sessions, Nxmulo blurted out, bless his heart, "But you can't go now!"

⁹ For example, see Frederick Winslow Taylor, The Principles of Scientific Management

But it never happened. Over the final three weeks Vicky and I were "on again, off again" in deciding whether to sell our car and household goods. On July 30th the Ministry threw a going away party for us at the Lugogo Sun, in Ezulwini. On August 3, Vicky and I left for home. While waiting on our plane to Johannesburg we were surprised to have three visitors. The first was Sam Dlamini. He had a last-minute question for me about making socioeconomic calculations. We had already gone through security and waiting to board our plane when John and Enid showed up. We got big hugs from both of them then we boarded the plane. What a nice feeling that these two would come to see us off. Towards the end John and I had worked closely and I think they both appreciated that I had succeeded in keeping Enid on as secretary despite Charlie's desire to get rid of her. "We'll miss this place," I wrote in my journal.

Swaziland8 7/26/11 8/15/17

Chapter 16: Swaziland, Part II

My Swaziland story did not end with Chap15. I have yet to tell about "our life" at Malkerns, which was a pure delight. Within the first week Chris assigned me a *baki*. On my first day off Vicky and I drove "up the hill" to shop for a vehicle of our own. A few days later, while I was busy with the training course Vicky returned to Mbabane where she stayed over night with the Fischers. The next day she returned to Malkerns in a deluxe Nissan with plenty of power and lots of gadgets. It was a beautiful car! Given the reputation of the last 15-mile stretch into Mbabane we wanted a car with enough accelerating capacity to pull out of the way of an oncoming vehicle should that be necessary. Later, we were to see an out-of-control bus careening down the road scattering vehicles in its wake. Right off the bat, although driving carefully because of the new car and driving on the "other side of the road," Vicky still got caught in a speed trap, but was able to "sweet-talk" the cop out of a ticket.

On our second weekend Vicky and I drove to the Royal Swazi Sun. The place was so nicely laid out amidst green grass, shrubs, and trees that it would have attracted attention were it located in Las Vegas. We walked up the steps to the pro shop, told the pro that we were recent arrivals, and would like to play golf. The *annual fee* for the two of us was just \$150, which included playing whenever we wished without further charges! Our mouths must have dropped open.

Through the Camp Superintendent we were able to hire Bonghi as our live-in housekeeper. She looked to be in her late twenties. The Superintendent was her uncle whose wife took care of her two young boys most of the time. She too was not married, which we had come to expect. She moved into one of the two small detached rooms behind our house. It didn't take her long to move in and arranged her few belongings. Then, she came outside and sat on the ground next to the door with her legs stretched straight out in front of her while she bent over some garment she was working on. She was absolutely delightful—neat, hard working,

cheerful, dependable, and able to communicate in English. Twice a week she got down on her knees to scrub and wax the floor by hand. Vicky tried to persuade her that she didn't need to do that so often, but Bonghi persisted in doing so. Apparently, this had been the routine where she had worked previously. One day she brought her two young boys aged four and six to see us. They were all dressed up and carried their own knobkerries. She beamed as she showed them off. One evening, she frantically banged on our kitchen door wanting to come inside. She said one of the night guards had threatened her. Vicky comforted her while I ran over to the Pali house just up the block to tell John and Enid the problem. Locking all the doors Vicky and I escorted her shivering with fear to the Palis where she spent the night. We all felt secure with this arrangement: John knew how to handle such things. The next day, I phoned Charlie who got the guards replaced.

A short while later we were looking for another day guard/gardener to replace Samuel, who had a drinking problem causing him to occasionally not show up. We quickly found another one named Jacob. As Vicky showed him around our yard and garden and was about to enter our garage—where we kept the gardening tools, he abruptly pushed her to one side saying, "Dangerous!" There, in the middle of the doorway—was a puff adder. Had she taken another step, she surely would have been bitten. Unlike other poisonous snakes in the area that seek to get out of the way when confronted, adders usually stay put. They are short, fat, and highly poisonous and said to strike so quickly that one can scarcely see this happen. Unless tended to quickly, their bite can be fatal. Jacob grabbed one of our garden tools and beat the snake to death. He got the job. This was not the end of it.

Several months later, our dog Freckles, was sniffing something in the doorway between our dining room and the patio. When I looked more closely, I saw that he was following a bright green six-foot long *boomslang*. These tree snakes while poisonous were reportedly docile. Once inside, it slithered behind our bookcase. I asked Vicky to keep an eye on it while

I called Jacob for help. He came running with a long-handled broom and stood guard while I pulled the book case away from the wall. At that point the snake tried to get away by moving up and over the bookcase. A few swats with the pole and the snake was dead. With that done, Jacob dragged the snake away from the house and along a path to the road 30 yards away. He explained that was necessary because the snakes "relatives" would come looking for their kin inside our house. Afterwards, Vicky and I looked under the beds, couches, closets, and other places where a snake might hide. To our relief we didn't find any. With that experience we put an end to leaving open any of the doors to our house. But to allow a cross-draft during the hot summer I built a screen door leading to the patio. Not too long afterwards, our neighbor's gardener told us that he had killed a spitting cobra close to the gate leading to our property. I tried persuading Vicky that the reason we were having these snake problems was because our house had been unoccupied for so long since others around us left their doors wide open during the summer months.

Given Vicky's aversion to snakes I wondered how she was going to get along living where we did. But, she adapted. Once, while driving up the road next to our house I saw another *boomslang* crossing the road, but kept that incident to myself. Later, when we were invited to others' homes, we noted that they left their doors wide open. When talking with the MD who served the community, he said that few people in the area are bitten by snakes. And had they been, antidotes are successful *provided* they get to him soon enough and knew what type of snake it was.

And there were other dangers we hadn't been told about. Break-ins, holdups, and killings were not uncommon. Jim Diamond told about gangsters who had stopped a car near his house, which was in the middle of town, told the driver to get out of the car before highjacking it in broad daylight. Swazis are prone to blame the Mozambicans who they say come across the border. A more shocking event occurred during our second month at Malkerns. Vicky had

joined a local Mahjong group of ten ladies. About the fourth time she met with them she learned that one of them along with her husband had been murdered over the weekend. The culprit had entered their house during the night and hacked them to death with a machete. The police still hadn't determined whether this was robbery or revenge because the husband was a local contractor. Also, we were warned not to visit the falls behind Big Tree, a popular restaurant located in the Mlilwane Wild Life Reserve, or to take the scenic Tea Road that overlooks Ezulwini Valley.

But, adding to our comfort was our day guard/gardener, but not our two night guards because we had been told that night guards, even though necessary, perpetrated as many break-ins as they prevented. Those of European descent who lived in Malkerns solved the problem by having their own security system. This group of about 75 families had one of its members on-call 24 hours a day. Should anyone be attacked or have a break-in, the person on duty would inform the rest who would form a well-armed posse that would come to the rescue.

It wasn't long before Vicky and I became accustomed to these dangers and the precautions we needed to take. Settling in, I applied for a resident driving license in which the examiner thought that I, at 62, was too old to be working. Nevertheless, he gave me the license. Neil, who seemed to long for company, had us over to dinner a couple of times and we reciprocated. More than once the Fischers invited us to Mbabane for dinner; and on one occasion we accompanied them to the Lutheran Church in Manzini, where John was active. Celebrating the birthday of his wife, Carol, Charlie invited a group of us to dinner at the Big Tree. To our surprise, the party was "Dutch Treat!" But, it portended of things to come. Later, after asking Chris to repair the thatched roof of our rondavel he said he didn't have money in his budget for that. So, I asked Charlie, who refused saying, "You guys are nickel and

¹ Because Vicky wanted to use this pleasant hut for her stained glass hobby we ourselves arranged for thatchers to repair the roof. The final bill? Only fifty dollars.

dime-ing me to death." With that, I thought back to how Sherm Clark urged us to live it up when we traveled, or of Ev Richardson, who made sure the members of our team in Egypt benefitted from our assignments there.

Asking around, we had heard about the Malkerns Country Club. Following directions we turned off the main road into an asphalt driveway and proceeded about 200 yards through a grove of trees. Off to the right we found a small parking area and a single-story building with a high roof on the edge of a large grassed area. We got out and knocked on the door, but no one answered. Eventually we learned that the Club was open Wednesday evenings and Sunday noons for meals and for drinks Friday evenings. When Vicky and I returned the following Friday we found the place hopping, which changed our lives from one of depending on those around us at the Research Station and friends in Mbabane to an active social life so close to where we lived. When we asked about joining we were directed to Chris Vickery, the Club's President. Chris was a local farmer of English origin whose father had settled in Malkerns after WW-II. Chris was tall, smiley, and self-assured. He told us the dues were minimal, but as members we must help out: I to tend bar during one week out of each month and Vicky to help prepare the meals once a month on Wednesdays and Sundays.

Looking around the following Sunday, we saw the open area beneath the high ceiling with card tables and chairs for those who came to eat. Off to the side was a small bar teaming with people seated at the bar, standing, or playing darts. We easily struck up conversations with several who were there. We learned that the membership was almost exclusively made up of farmers of first, second, or third generation English or Dutch immigrants. Not a "black face" in the crowd, except for the help. While it was too dark to look around outside Chris told us there was a large adjacent field where teams periodically played rugby or cricket, a swimming pool, a bowling pitch, two tennis courts, and a building where squash could be played.

Vicky became close friends with Una Halberstadt, who was often her partner in fixing the meals. It was here that we learned about two traditional English dishes: "bubble and squeak " (shallow-fried leftover vegetables from a roast augmented by potatoes and cabbage) and "bangers and mash" (sausage and mashed potatoes). Both had proven themselves popular at the Club. Once Vicky prepared confetti chicken, a dish with well-cooked chicken breasts and thighs that are served with spaghetti and a tomato sauce. When some of the male members heard that they were to be served chicken, they mumbled "Not chicken again." But after the meal, they complimented Vicky at length.

Una of Scotch origin was married to Büt, a retired engineer of Dutch origin. They lived in a large two-story house, with a thatched roof, along the road leading to Malkerns. Chris was their son-in-law having married Wendy their only daughter. Chris and Wendy lived in a large farm house of modern design not far from the Club. The large plot on which the house sat was part of the land Chris farmed as an inheritance from his father who had migrated here from Egypt after WWII. The property even contained a small pond frequented by a hippo and her brood. Once, they found an eight-foot crocodile resting by their front door. Wendy, a talented gal, had supervised the many Swazi women who worked at the Dole Pineapple cannery located next to the Club. Recently she had given up that job to open a gift shop in Ezulwini. Because of her contribution to the community, Wendy had been invited to participate in one of the Reed Dances, but without shedding her upper garments nor being eligible as a bride for the King.

I enjoyed my turn at bar duty. In time I learned who drank what: most drank Castle or Lion beer produced in South Africa, or Amstel, an imported Dutch beer. One young man would order a chocolate bar to drink with his beer. Some drank South African wine: Nederburg was low priced and popular. Una's husband, Büt, drank brandy neat. The dart board, next to the bar, drew a crowd usually with pairs waiting to challenge the winners. Because most were farmers who had lived in the area for years, they knew each other well and had a lot to talk about.

I found it curious that during the winter months when the temperature dropped to near freezing, the men still showed up in shorts while wearing a heavy sweater. Enjoying his stature as president, Chris could often be seen with a crowd around him pontificating on something. Once it was about a new camera he had just bought. In time, I found him to be a pompous windbag. One quiet Sunday afternoon when tending bar, Dr. Brooks, a middle-aged physician was the only customer present. Trading stories, eventually he said that AIDS was becoming so widespread that the disease would soon devastate the country. He could see this happening based on the infection rates of those coming to his clinic.

With time, we got to know more of the group, including Dawn Hulley and her husband whom they affectionately called "Farmer." They did own a sizable farm, but he also managed the cannery. Undoubtedly he must have been a great rugby player in his prime. He stood about six-foot three, probably weighing 230 pounds. Once at a wine auction we saw just how quick on his feet he was when, after winning one of the bids, he leapt out of his chair and jumped onto the three-foot stage to claim the case of wine he had just bought. And there was "Small" (which she wasn't) McCloud whose husband was the official British representative in Malkerns; the two Packard families who were both longtime residents; the family who sold un-pasturized milk from their dairy farm in which the husband had "wandering hands" that Vicky was warned about; the chicken lady who sold live chickens; the husband of the couple living just up the road from us who had a brain tumor that caused him to slobber when speaking; Dr. Neal, the charming young physician who served the area; Anne Budd who was a natural-born actress and her husband Ollie who was a former military officer in Southern Rhodesia who felt it prudent to leave before the country became Zimbabwe; the Stuarts: he, being the only white member of the Swazi Parliament; Derrick James, Chris's business partner, who was experimenting with turmeric and was an excellent athlete; and Mickey Lindsay and her husband who eventually lost a foot despite her pleas that he do something about his diabetes problem. Oh, there were so many interesting ones.

In November of our first year, we joined a group from the Club to take a narrow-gauge train ride to the Low Veld. Once there we got off at a rustic resort, walked around, had drinks and a leisurely dinner, then re-boarded. We had departed from the industrial park near Manzini at 4:30 p.m. and didn't return till 5:00 a.m.! The local Kiwanis Club had sponsored the event.

By now Vicky and I had become part of this Malkerns group. We played golf with the Usutu set, not knowing beforehand how good some of our friends were, Derrick James being one of them; we went on picnics to quiet out-of-the -way places including one that overlooked a small mountain pond; and were invited to parties at the homes of the Stuarts, Halberstadts, Vickerys, and even the McClouds' secluded ranch home. Vicky's close association with Una may have helped us establish ourselves, although my "argument" with Chris might have helped. Sitting at a table with him one Wednesday evening, I listed to him explain how he could "solve" the country's maize production problem. All it would take was to hold a competition in which the SNL farmer with the highest maize yield in some season would win a baki. He was convinced that, since most of these small farmers lacked a vehicle of their own they would coveted having one. The winner would be able to demonstrate the best way to increase yields, the others would learn about it, and the following year adopt the improved practices. I thought the idea dumb and insulting. It was dumb because John Pali and others at Malkerns knew how to increase maize yields as did the large farmers. The problem was that *small-scale farmers*, of which there were so many, did not have the resources to buy the inputs leading to high maize yields. And, from an economic standpoint, applying the input producing the last increment of yield, necessary to win the competition, would not be economic. I found it insulting to suggest that the Malkerns' RO s and advisors, such as myself, were superfluous. I read his comments to mean that "real" farmers like himself could solve the country's agricultural problems without the likes of me and my associates. He didn't say as much, but that's how I read it. If

development were so easy, why was I here? Why the AID program? Why Malkerns?² Our voices must have been raised, as mine sometimes does, when I get into an argument.

Unbeknownst to me was that several near us, including Farmer who was not fond of Chris, were listening in. Without trying I had impressed many of the Club's members.

Besides the regular dinners and bar-nights Club members celebrated Christmas with a children's pageant, including plays where members revealed their fine acting skills. One of our favorites was Anne Budd's skit about a women fed up with her husband's drinking. So, she figuratively poured his ample collection of liquor down the kitchen sink. But with each bottle she pretended to take a nip. By the time she had finished the account, she was slurring her words and stumbling on the stage. Her skill in progressing from being a well-meaning wife to one being in a complete stupor kept us laughing long after she had finished. A couple of times a group would get together on the small stage and play charades. The quickness and imagination of Dr. Neil impressed us all. Made us glad that "our" doctor was so bright and quick-minded. We began getting invitations to small dinners hosted by the Halberstadts, Vickerys, Lindsays, and others. On a beautiful Sunday morning we attended a boules tournament. The weather was just right: sunny, still, and 72 degrees. The male competitors were dressed in white trousers and short-sleeved shirts, black ties, and straw hats; the women in long flowing, lace dresses that touched the ground. And quiet! Reminded me of a nineteen century French painting. It was here that we learned that Wendy was on the national bowls team, which competed internationally. The tournament over, Chris, also an excellent bowler, taught a group of us bowling techniques that I thought must be similar to curling. We learned enough to find it fun and worth trying again, although we didn't. Another time we watched a cricket match on the

² Similarly, the Chinese were guilty of thinking the same way. Except, in their case, they themselves were acting as the farmers who tried to demonstrate high yields by using the optimal amount of inputs. Their approach didn't fit the average SNL farmer any better than did Chris' idea.

large green area next to the Club. Before long, Vicky and I joined the Club's bridge group playing two or three times a month. Eventually, we succeeded in getting Sebe to join us at the Club; although we held our breaths worrying that someone would make some disparaging remark about the Swazis and having her wonder why so few Swazis belonged to the Club.

The word got back to Mbabane about how enjoyable we found the Club. So, Charlie, Carol, Jim, and Betty began coming down. Even Sharma asked if I would invite him and his wife, which I think I did. Some at Malkerns had found Jim a fool because of his outgoing nature and penchant for saying, "If I felt any better" But one day he proved otherwise. He, Charlie, and their wives, ignoring warnings not to along the Tea Road went there anyway. As they got out of their car to view the scenery below, they were accosted by two Swazi men. They got up close to Jim threatening him with a knife and telling him to hand over his wallet. Instead of doing so, Jim grabbed each around the neck and cracked their heads together. Surprised by the quickness and strength of Jim, they bolted. Jim got his pants slit but was not harmed physically. For once, Jim was quiet about what happened. Charlie was the one who told us the story.

Occasionally, Vicky and I would go to the pool at noontime. We would swim for awhile then have the lunch Vicky had packed for us. Sometimes a ten-year old boy would be in the pool with us; his mother sitting watchfully by. It was sad to see, yet encouraging the way the youngster handled his misfortune. He was born without arms, a result of one of the birth-control drugs in use at the time. Being in the water was no problem for him. The way he swam reminded us of a seal. When he grew tired he would move to the edge of the pool where the water was still over his head, and his mother would lift him out. The two seemed to have grown accustomed to his disability, talking and laughing as though all were normal.

What Vicky and I liked about our experiences with Club members was their inclusion of us. It was such a colorful group who had courageously settling in black Africa. By the time we

left we had been invited to a picnic alongside a secluded pond off the beaten track, played golf with them at Usutu, and participated in other events. Shortly before we left we had attended a large party at the farm of the only white Member of Parliament, and a small party at the remote ranch house of the British envoy.

Besides all of the activities at the Club, golf, and occasional dinners at the homes of some of our friends, Vicky and I just enjoyed our life "on the farm." Our "farm house" was comfortable, we enjoyed listening to newscasts on BBC, including Daljit Dhaliwal on Sky TV, and watching US tennis and European soccer matches, watching an extravaganza by Paul Simon, or listening to Hugh Masekela, Yellow Man, and the Black Choruses singing folk songs. Ed Dooley continued sending us tapes of the Bronco games. So, our tradition of watching "Monday Night Football" continued. We were able to watch Shaka Zulu on TV before reading the book. The story of Shaka was captivating, which told of the wars against the British occupiers and how he hardened his warriors so that they could walk barefooted through thorn bushes. The account of witchcraft still haunts me. Suspecting an elderly woman of being a witch Shaka ordered her placed in a hut with a hyena tied to a rope that was long enough for it to reach the witch. She had a stick that she was able to use against the hyena to keep it from nipping at her feet. But then after many hours of tense alertness she became drowsy and the hyena cautiously crept towards here. Sensing its presence, she awoke and used the stick to beat the animal back again. Eventually, she fell soundly asleep. And that was the end of her. How cruel! We also read Cry the Beloved Country by Alan Paton, which described the troubles of a black family living in modern-day South Africa. These two books, and others, helped Vicky and me learn more about and better appreciate where we were living. And on quiet summer evenings we found it pleasant just sitting on our patio, having a drink, and watching the sun set behind the low mountains to our left.

Once our sea freight arrived, I took my time dismembering the wooden container so that I would have the boards, planks, nails, and strapping as material for various jobs around the house. I built the screen door to our living room and shelving over our small gas burner that Vicky used when the power went off, and a workbench with slotted storage bins for Vicky's stained glass. I assembled the lawn mower, and liking the job, would spend an hour each week cutting grass. It worked fine, until I ran over a protruding root that bent the shaft. I thinned the bougainvillea next to the house and cleared the vine that had overgrown the lemon tree. Oh, there were just a lot of things to do on our "little farm."

And when Vicky and I wanted to depart from our routine, the area had several excellent restaurants. Besides the Big Tree, there were the First Horse and the Calabash in the Valley as well as the Mongolian Beef restaurant at the Royal Sun. After the Broszs arrived occasionally we would go out for dinner with them. The Foresters Arms was one of the first places we introduced them to. On two occasions we drove north to Piggs Peak as part of a work-related conference. Facilities there too were excellent, given the casino's attraction for South African visitors. Even the weather was agreeable: never too hot nor too cold and interesting thunder storms during the summer and just a hint of frost during the winter. Whenever we experienced a major downpour we could expect the power to go out. Once we were without electricity for 40 hours, which caused us to worry about the food spoiling in our small freezer, and our water being turned off since power was needed to keep the station's storage tanks filled. Anticipating the problem Don and Neil scurried about filling up the rain barrel behind each of our houses.

We learned a few terms used by the Swazis, such as beets being called beetroot. And we took advantage of the excellent and inexpensive South African wines. Blanc du Blanc was one of them. Occasionally the Broszs accompanied us to the Club. Don's outgoing nature was offset by Pearl's shyness. Petite and pretty she clung to Don for support, occasionally relying on

Vicky to drive her to Mbabane, but chose not to participate in fixing meals at the Club. She never got the courage to drive. She had scarcely traveled outside Wyoming before coming here.

I especially liked the two-day weekends when I was under little pressure from work. When Vicky asked me what I planned on doing. I enjoyed saying "I didn't know!" Occasionally I did work late at the office and on a few weekends, but it wasn't the constant grind as in the past. When CSU told me that Winrock International wanted me to write three FSR training modules, I willingly complied and looked forward to seeing these in print.

Golf was a nice diversion. Besides the country club atmosphere at the Royal Swazi Sun, Vicky and I also joined the Usutu Forest Golf Club playing there occasionally. As the name implies, the course was carved out of a forest. Undulating in spots, lined by trees, and with a stream running through it, we found the course challenging. Our golf games had suffered during our time in Yemen, which added to the challenge. Club members were mainly English and Dutch, although a few members were black. One day while playing golf at the Sun Vicky fell to the ground grasping her hip. We both feared it might have been dislocated. By chance a Chinese doctor, specializing in acupuncture, who was playing behind came to her rescue. After testing the range of motion of her leg, he began pressing hard on pressure points just above her kneecap. This hurt, but gave Vicky enough relief so that she could continue playing. The next day I drove Vicky into Manzini to have Dr. Neale diagnose what happened. He said she had torn the muscles and ligaments in the hip area and needed physical therapy. The therapist was also readily available in Manzini. So, instead of being stuck in the "wilds of Africa," we enjoyed the services that were as good as we might find at home. Before long Vicky was able to play again. We were never quite sure why she had fallen.

On September 28th Mike called to say he and Marty had gotten a divorce. We were saddened to hear this, but it wasn't news because he had been telling us about their troubles. Vicky longed to be near him to give him her support, but she didn't return home.

Midway through the second year Vicky and I attended a Swazi wedding at a small church off the beaten track in Makhonza where nearly 100 attended. The bride and groom walked down the isle to a reggae beat, stopping every few steps, stepping to one side and then the other. The bride's flowing white lace and the groom's white tux with a red rose in his lapel, contrasted nicely with their light brown skin. A Broadway production couldn't have been staged better. The affair had started at 10:00 a.m. and lasted till 4:30.

Making life even more enjoyable were the visits of Becky, Teresa, Mike, Paul and the Thayers. Sandy and Nona stayed only two days; but that gave us enough time for them to see how we lived in Malkerns and for us to get updated on the news in Fort Collins. Cecil Bartlett, our dentist, and his wife had planned on coming, but had to cancel at the last minute. In June, 1990 Becky, with Teresa, flew in from Ethiopia and stayed for two weeks. During that time Vicky and I threw a party inviting the RO s, RA s, and the Penn State crew. We made sure that we provided enough meat, *mealies*, and beer to make this a suitable *braai*. All went well, the weather cooperated, and Becky had a chance to meet and talk with Sebe among others. Over one of the weekends we drove to Kruger Park staying at the Malelane Lodge on the banks of the Crocodile River just south of the entrance. At dusk during one of the days a leopard darted across the road in front of us. What a treat to see this powerful animal, since one scarcely has a chance to see them at close range. At other times we ate at the Club, Becky and I played tennis, we went to Ezulwini for dinner a couple of times, and just lounged around, talking, and getting to know our second grandchild.

In November Mike and Paul arrive: Mike stayed for two weeks and Paul for a month.

Mike felt he couldn't take more time off from his job as Assistant Pro at the La Quinta Citrus

Club. Paul had been caddying on the Seniors' Tour for Doug Sanders. We have a picture of

him caddying for Sanders in a foursome that included President George W. Bush and his father

George H.W. Bush. Currently, he was Rocky Thompson's caddy. Because it was the off-season he was able to take the month off. Vicky and I couldn't believe what we saw when we picked them up at Matsapha. They were in shorts and polo shirts wearing floppy sandals and had just a couple of small carry-ons! Being a Wednesday we took them to the Club for dinner. Then we went home so they could catch up on their sleep, which they did, sleeping till the afternoon of the next day.

One night at the Club, they got in the challengers' line for darts and surprised the crowd, who thought they could show our boys a thing or two about the game only to be amazed at how good they were. Both must have played darts before, probably not often; but their hand-eye coordination helped them win game after game. Vicky and I were excited to see how our friends accepted them and by how easily the two of them fitted in. At other times we played golf with them at the Royal Swazi and other times they played there on their own. Both were good enough that the young pro there frequently joined them.

As with Becky we spent a few days at Kruger Park staying at the Malelane Lodge. Going through the breakfast buffet the first morning, I helped myself to a large scoop of molasses from a small bowl. I had always liked it, but seldom had seen it served like this. When I tasted it, I found it was not molasses at all. It was Vegemite, a dark brown paste made in Australia from yeast extract! Just a small amount of it spread on toast is enough. It would take years before I developed a taste for it. I scarcely know how to describe it. The closest thing would be battery acid, if one would be foolish enough to try that. I left the glob on my plate hoping no one would notice. For two days we crossed the bridge a short distance away to take in Kruger Park where we saw an elephant herd feeding, two bull elephants bathing, two cape buffalo, three rhinos, and bushbuck. After lunch each noon we strolled over to an area where we could watch hundreds of swallows flying in and out of their hanging nests with the flowing river far below. Back at Malkerns the days slipped by and soon Mike was on his way back to California.

By staying longer, Paul was able to make friends with one of Wendy's sons. Besides enjoying each other's company at the Club, the two of them explored other spots up and down the road to Ezulwini. Paul continued playing with the pro at the Royal Swazi. Then he and Vicky flew to Johannesburg to take the luxury Blue Train to Cape Town. This gave Vicky seven days to spend with him. After settling into their hotel in the middle of town, Vicky rented a car so they could explored areas of interest that included the beach, the wine country, and Stellenbosch. One day as they approached Cape Town they noticed that the road kept narrowing, the traffic kept thinning, and the number of shanties along the road kept increasing. Then suddenly they realized that they were about to enter Crossroads, which was one of the ghettos just as dangerous to outsiders as Soweto. Almost in unison they said, "Lets get out of here!" Back at their hotel, which was whiter and safer, they would sometimes go out to eat; if Vicky felt tired they would eat at the hotel restaurant. Afterwards, as Vicky would be getting ready for bed Paul would go out not yet ready to bed-down.

Once back at Malkerns Paul continued palling with one of the Vickery kids. On one of the weekends we drove to Usutu to play in a club tournament. Paul, who was matched up with the Club champion, shot a 73, which was respectable but not good enough to win his match. After lunch and during the announcement of tournament results, Paul got called to the front and was fined the equivalent of five dollars for wearing "women's" cutoff socks. Paul got red in the face, paid the fine, then relaxed and laughed with the rest of the crowd. He didn't bother to explain that these socks are perfectly acceptable in the States. The next day we drove him to Matsapha for his flight home. Vicky and I watched as he climbed the portable stairs to the plane parked about 50 yards away. At the top of the platform Paul stopped, gave a Nixon salute, and entered the plane. That was the last time we were to see him.

Then, there were our trips, nine in all. Something quite impossible under any normal long-term contract and more time off from work than at any time in my professional career. The first came at Christmas when all those at Malkerns and our Mbabane team took time off. We had heard about Durban as a fine place to visit. So, Vicky and I chose that as our first multi-day excursion. The eight-hour drive there was easy enough and allowed us time to drop off Vincent, one of the RA s at his mother's home in Kwa Zulu. As we drove towards the coast the area switched from rolling hills to tropical greenery. We checked into the Royal Hotel, a lovely place in the center of town. We walked up and down the pier directly east of us, then drove to the beaches, looked at the city's shopping centers, dined on fish at the Germain, Pescado, and Umhlango Rocks restaurants, explored the beaches south of the city looking in vain for the popular beaches at Scottburgh and Illoni. The main problems was our inability to find the proper exit from the north-south freeway. But, we were able to visit an artists' colony with its complex of shops that sold paintings, leather goods, and handicrafts. While there we heard about week-long art classes and group hikes along the hills overlooking the ocean. Being so close to us and so soon in my assignment at Malkerns we both thought it would be fun to participate in some of these activities.

Back in the city we took our time to walking around the tourist areas near the beach. As we were at an intersection, we heard a ruckus up the street to our left. A light-colored couple standing on the landing above street lever were screeching at each other. Suddenly, the woman ran down the steps and hopped into the back of a *baki* with a male close behind her. Feeling I should to *something*, I was about to cross the street and head to where they were. But then, a sedan rounded the corner in front of us, and raced up to the parked vehicle where four young white men jumped out of the car, grabbed the guy, and forced him into their car. Another one in the group grabbed the girl and placed her in the car that followed. Apparently someone had phoned the authorities. We guessed that the men in the vehicles were plainclothesmen, for they were without uniform. Later, we talked about how close we had come to having been run over,

and wondered if this is how apartheid works. They were efficient and rough in the way they treated these two "colored." After four nights at the hotel, that included Christmas, and wanting to see more of the country we headed home by going straight up the incline to Pietermaritzburg then north through Ladysmith, Dundee, and Piet Retief, and eventually through Mbabane and home.

Three days later, we drove straight west for six and a half hours to Joburg. While skirting Soweto south of the city we passed gold mines with their piles of rubble. What impressed us along the way were the many nuclear power plants and large spreads of modern agriculture, unlike anything we had seen in Africa. Then to the city-center where we checked into the first-class Carlton Hotel. We were warned not to stroll the streets, even in broad daylight. Even so, I ventured a few blocks away from the hotel without incident. Not wanting to press my luck I stayed with Vicky inside the hotel's shopping complex after that. We celebrated New Year's eve by dining at the hotel's Three Ships, where we were introduced to *Gran vin blanc*, an excellent, moderately-priced South African wine. We left the next day before lunch. Wanting to follow a different route on the way back, we drove to Nelspruit then south through Barberton to Swaziland's northern entry point. Just missing the 4:00 p.m. closing time, so we continued down the west side of the country through Oshock. Driving through this remote, wooded area was worth the experience. We reached Malkerns by 8:30.

As May approached, we had been in Swaziland long enough to qualify for R&R, which allowed us to take a ten-day vacation in Mauritius. The ride from the airport gave us a glimpse of life on the island, which looked appealing in its tropical setting despite the few spots of poverty we saw before arriving at our resort hotel. Most of the guests were Europeans. We snorkeled and lolled around on the beach for the most part. But, we did join a group of 40 for a sailboat trip to a nearby island. All but one of our group were modestly dressed. The exception was a well-tanned topless young lady who sat across from us. We talked with a middle-aged

Italian guy sitting next to us who couldn't keep his eyes off her. Although he and I maintained a continuing discussion I don't recall what he said. I was having "eye-trouble" too. However, the most exciting part of the trip came when our ship set anchor about a quarter mile from the island where we were to have lunch. The crew lowered a life boat, let down the gangplank, and told us we could board, unless we wished to swim to shore. Because we had our snorkeling gear, Vicky and I chose to swim. The water was pleasantly cool and crystal clear revealing abundant antler coral that almost touch us as we swam. I don't remember much about the barbecue.

After only fifteen months on-the-job, we also qualified for home leave. Perhaps that was part of the Penn State contract that CSU had negotiated on my behalf. In any case, I was absent from my job for 37 days. Vicky and I flew from Matsapha to Joburg where we overnighted, then on to Frankfurt and finally to JFK. We overnighted at St Moritz where Vicky and I had stayed after our wedding. Tim, who was working in the City for as a secretary for Bon Appétit, met us for breakfast the next morning. After that, Vicky and I walked through Central Park, visited the Metro Museum of Art, went to Chinatown for dinner. Then Tim drove us to the Palasits' home where we stayed for two days that included attending a Yankees game.

After flying to Fort Collins we stayed with Dad the first night then moved in with the Dooleys. I explored funding possibilities at CSU without any luck and contacted Winrock about the three FSR training modules only to learn that they had not been used. Vicky and I played in the annual Lads and Lassies golf tournament where we came in second in the first flight. Next, we flew to La Quinta to see Mike and Jaclynn, then to Myrtle Beach to see George and Lee. All too quickly our five weeks were up and we were back in Malkerns.

This time for the Christmas holidays, Vicky and I drove to Sun City in Boputhatswana, one of South Africa's tribal lands. These enclaves are part of the Apartheid Government's

separation of the blacks and whites. This area had become popular among golfers for the annual Million Dollar golf tournament played at a Gary Player designed course. Rather than going there directly, we drove through Nelspruit to Pilgrim's Rest, an old gold town west of Kruger. We spent the night in one of the reconstructed homes that had served as housing for the camp's supervisory staff. The next day we followed the Panorama Route to Kruger where we stayed for four nights. Next, we visited briefly the Drakensbergs with their deep gorges that reminded us of the Grand Canyon, except for the green vegetation, and then a small virgin forest. From there we passed between Joburg and Pretoria, skirted a lake with sailboats and lots of bathers, and before long we were in Sun City. One of our reasons for going there was to play the Gary Player course. The huge Sun City layout contained several large pools, hotels, restaurants, shops, and entertainment centers teaming with Asian. After two days of golf, Vicky said she needed to rest. The remaining two days we swam, visited the casinos, enjoyed good food, and relaxed. While we found the place interesting and the golf excellent, we were taken back by all of the noisy kids running around. Our eight-hour trip back to Malkerns was routine.

For our last trip, which was in March, Vicky and I drove to Joburg and stayed all night at the Carlton before taking the Blue Train to Cape Town. The next morning we drove our car onto a flatbed that would accompany us, then we waited at the terminal for the train to arrive. As we stood at the boarding area, the train, appropriately painted blue, slowly backed towards us. Looking through the windows we could see the stewards in tuxedos standing at attention and facing us. After being seated for dinner the steward brought us champaign that he kept refilling till we said we had enough. Our delicious dinner was complemented by a fine South African wine. When we returned to our coach we found that the porter had converted our seats into beds. So, we were able to bed-down straight away. We rested so well that we missed the high plains of the Great Karoo, which I would like to have seen. Rather than stay in Cape Town we drove the short distance to Stellenbosch where we stayed for two nights at the classic, old hotel, called the Doer Woerf, a hangover from the Boers.

The next day we walked the short distance to the Stellenbosch University, where Eckert once had a teaching position in the Department of Economics. After that we drove to Franschhoek to explore the beautiful wine country nestled in a mountainous valley where the French Huguenots had settled in the seventeenth century. Typical of the area were the white stuccoed buildings with their characteristically Dutch-shaped fronts. We lunched in the garden behind a small inn. Next, we stayed for two nights at the Bays Hotel. From our view across the coastal road we watched a bicycle race just below our balcony. We also took a leisurely drive along a winding, picturesqueness road with the pounding waves and white beaches below us to dine at one of the many seafront restaurants. At one point, I parked the car and followed a narrow path down to a shallow beach to test the water. Not only was it cold, but I saw evidence of an undertow. So Vicky and I confined our swimming to the hotel's pool.

Another day we squeezed into a cable car and rode to the top of Table Mountain. On the long ride up Vicky told me how Paul felt nervous about our car hanging from the cable for so long. We spent a couple of hours at the top walking along the several paths, observing ground squirrels, gazing at the wonderful view from this high up, and marveling at the hang gliders who launched themselves from the rim's edge.

After two days we drove straight south to Cape Good Hope and the light house at Cape Point. Getting to the lookout alongside the light house meant leaning into the strong southern wind as we walked up the steep and crowded path, the same as Vicky had done with Paul. Earlier, she thought this was the southernmost tip of Africa where the Atlantic meets the Pacific. But that was wrong. Where they do come together is further along the coast. We continued along the east side of the Peninsula until we reached Simon's Town, the country's third oldest settlement dating back to the seventeenth century. We ended our first day less than an hour's drive from Cape Town. But our intent was to visit interesting places, not make time on the road.

We learned that Simon's Town, now a suburb of Cape Town, is the last stop on the daily commuter train. Driving up the main street past quaint Victorian buildings with the Bay and Naval Base off to our right we chanced upon Lord Nelson's Inn, a small but interesting three star hotel where we stayed. We found the small lobby interesting with its bust of Lord Nelson, glass-framed accounts of his journeys hanging on the wall, his portrait, paintings of ocean scenes, and a cozy bar off to one side.

To reach the southernmost tip of the continent, we drove to the beach where we saw the stone marker saying as much. This rugged site with rocky outcrops, strong winds, and rough surf, had a history of shipwrecks. I made my way down to the small sandy beach, touched the cold water confirming that swimming in the ocean was out of the question, and picked up a smooth well-rounded white granite stone with a circular orange mark about the size of a silver dollar as a souvenir. It was here I met a deeply tanned young fellow who said he was touring the African periphery on a bicycle saying he was happy he had made it this far. From there we drove the short distance to Arniston. Rather than check into the popular resort hotel, we found a place with two-attached units not far from the water's edge. Luckily for us the restaurant was still open. After dinner we returned to our room and soon fell asleep in spite of the strong winds that blew all night.

The next day we drove north to reach the national highway making it to the Fancourt Hotel and Golf Estate in George where we spent two nights. We asked our host about the golf courses adjacent to the hotel and learned that they were still under construction. We then strolled the fairways for a couple of hours. For the most part they were wide and rolling with expansive views, but only a few tall trees.

That evening, as is our custom, Vicky and I went to the bar to have a drink before dinner.

Upon entering we noticed four stools at one end. One of them was occupied by a dignified fellow of about our age who looked as though he might be English. We asked him if he minded

our using two of the stools. "Please do," he said. Before long we had struck up a conversation. We asked about life in Cape Town, where he and his wife lived, and he asked us about our life in Swaziland.

After awhile he said his wife would be joining him for dinner; would we like to join them to which we gladly accepted. When she arrived he introduced her to us as Ina Paarman. She was a beauty with a mature Shirley Temple look, perhaps forty. After dinner we moved to the sitting room for "serve yourself" coffee from an urn and brandy from a decanter where we continued our conversation. Eventually we learned that she was a South African celebrity with a regular TV program and her own magazine on cooking—the Julia Child of South Africa. She said she was looking for a larger audience and wondered about the possibility of expanding her audience to the USA. We also talked about Ethiopia recipes, which Vicky sent her after we returned home.

Asking around we learned about the famous Cango cave in the Klein Karro that was close by on the other side of Oudtshoorn. Skirting the town we drove past long stretches of high fencing, which turned out to be the famed Oshack Ostrich farm. At the cave site we walked from the parking area to the cave passing displays that showed the cave's long history: when it was discovered, by whom, and outstanding events. Once inside the cave we were in a large cavern with the expected stalactites and stalagmites and colored sections revealing different minerals. Exciting for me was when our guide brought us to the face of one of the caverns. In front of us was a 20' ladder leading up to a small opening in the wall. Our guide said that was the beginning of what he called the "Adventure Tour." Those wishing to go there would have to be in good shape, climb the ladder, and not be claustrophobic adding that he would not be taking the Tour. I had my doubts about going, although I felt in good shape for a 64-year-old. I was still undecided when I saw within our group a boy of about twelve and two teenage girls. That was enough. If they could handle it, so could I. And an adventure it was. The square opening

at the top of the ladder looked 30" high and across, which meant a really fat person wouldn't be able to enter.

Once inside, our group had to crawl stooped over, sometimes on our hands and knees, for about 100 yards. From there our path was easier. We climbed a long set of iron stairs, viewed ledges above us and pools of water below us, and looked at places labeled the Coffin, Kitchen, and Devil's Workshop. But the *really exciting* part came at the Chimney. We literally had to climb straight up through a narrow opening that was over 10' high and only 18" across. I stood politely by to let most of them go before me. But I didn't want to be the last one up because it might need some pushing and shoving for a person to reach to top. Finally, I stepped in front of the two teenagers and their father about to take my turn when the father quietly asked me if I would mind letting the three of them go first. That meant that *no one would be behind me*! What could I do? So, I said, "Please do." But it wasn't so bad after all.

Then reaching this higher level we came to the final obstruction, called the Post Box, which we all had to go through. Our guide had told us before we started that once we reached this point there was no going back. The opening, which was 4' from the floor was smooth and wide enough, but the opening little more than a foot high. But once I had gotten through the opening, the drop was an easy one. I finally caught up with our gang, which made its way back through the narrow passage that we come through at the beginning. This time we handled this part in stride. Our guide had waited along with Vicky and others for our safe return. Then he said that the oxygen level inside the area where we had been was *only fifteen percent* of the level outside the cave. I was sweaty from the effort, but excited. Vicky reminded me what I had said as we left the cave. "That was one of the most exciting things I've done in a long time."

The following day we drove the short distance to Knysna, a vacation town popular as an artist colony with its protected bay and marina. We checked into a lodge on the outskirts of

town and was assigned our own cottage with its white stucco exterior and slopping thatched roof. That out of the way we returned to the marina to one of the shops recommended for its collection of fine wooden replicas of African birds. We chose one that was colorfully painted with a long-bill and forked black tail. After making the purchase we thought a better choice might have been the hoopoe bird, with its red-crested head. Still, we were happy with the purchase we made. We ended up in a large shopping mall located against a hill that overlooked the bay. There were shops upon shops. We bought a few things and thought it would be nice to return some day to attend one of the painting courses and perhaps join one of the groups that would hike along the hills overlooking the ocean.

That took care of our stops along the Garden Route. We continued up the coast to Port Elizabeth then through the Ciskei, a Xhosa homeland. We had chosen this one, rather the Transkei because of the current unrest there. We passed Grahamstown and then Fort Hare. The latter is the location of the black university where Nelson Mandela had attended, that also caters to missionaries. Then we proceeded north, through the camp grounds at Hogsback, and finally to the Hogsback Inn. We opted to stay in one of the cabins rather than in the main lodge. Just before turning out the light on the stand next to our double bed, I saw a *big, black, spider with a body three inches across* on the wall at pillow level just a couple of feet away. I altered Vicky then eased my way out on the other side of the bed, then we hailed the chambermaid who in turn called for help. The fellow who came in with a spray bomb seemed unafraid reassuring us that he had never seen one of these before.

The following day we drove to Bloemfontein, the capital of the Orange Free State. Skirting the city we drove straight to Meseru where Becky had worked for the Peace Corps. Her first two years were as a math teacher on regular assignment in a rural area. Then, as she was preparing to leave she met David and decided not to leave. So, the Peace Corps Director arranged for her to extend for a year, first in helping orient new arrivals then as an advisor to the

Government's pottery factory. For two years after that she taught math under contract with the Government of Lesotho. We checked into the Cabanas, a modest room and boarding place near the city center. The next day we looked around town, checked out the market, and in the afternoon went to the Hilton for a drink. The receptionist told us the wall hanging was still in place facing the main stairs. We proudly said that we were the parents of the one who had designed it.

The next day we exited Lesotho, drove around the northeastern side, passed Ladysmith to the east, then down to the Champagne Castle Lodge nestled at the foot of the Central Drakensberg mountains. The following two days we hiked the well-kept paths that begin close to the lodge then wind their way up the base of the mountain. After a couple of hours of this we were high enough to have an impressive view of the land that stretched out below us. Directly above us thousands of feet up was the high plateau of Lesotho. We wondered if Becky in her journeys around the country had come to some spot above us and might have gazed down at where we were staying. Beside our path were bushes with bright pink flowers, sage that gave off its pungent odor, and even a few Protea.

Finally, we departed for home. On the seven-hour trip we passed through Harrismith, Newcastle, Piet Retief, Ermelo, and Carolina close to Mbabane. These well-kept and orderly towns looked so similar to ours at home that it was hard to believe we were in Africa. Finally, we entered the control point into Swaziland and drove through Mbabane, down the hill, through Malkerns village entered the Research Station's gate, drove past the prison on our left, and to our house. That was March 21st. We had been gone 17 days that included our thousand-mile journey from Cape Town. Although we had a wonderful time it was good to be back. We had seen so much and were getting to know more about this part of the world. There were so many things to do, see, and learn about this part of Africa. And, I enjoyed my work at Malkerns, particularly now that we had begun to implement a CRS program. Effusing, I said that I could

gladly live here another ten years. Later, Vicky told me that said she didn't think much of the idea. She might have been thinking of the Grenobles who struggled to find meaningful work and they to find a suitable home. Being on one's own is quite different than being part of an organization whether it be USAID, MOAC, or something else.

In June, we were surprised to see Harold Bergsma walking along a street in Manzini. He, Lily Chu, and Harley, their teenage son, were living there. He had accepted an advisory position for one of the international schools west of Mbabane. Strange how our paths keep crossing. Shortly before we left, Harold and Lily invited us to their home for dinner. After dinner we continued our discussion, one of which concerned their Chinese doctor friend, the one who had come to Vicky's aid on the golf course. As our conversation wore down, Harold suggested we go into the living room to watch a video that Harley had rented. As we watched the movie unfold, Lily suddenly became alarmed and asked the name of the movie. Harley said it was *A Funny Thing Happened on the Way to the Forum*. Sensing where this bawdy film was going, Lily quickly shut it down. We departed soon after that, which was the last time we saw them ³

I had failed in my attempts to extend my contract and it was now time to get ready to leave. We sold many of household effects to the Swazis, who were happy to buy them, our Nissan to Paul, and our lawnmower to Sam. After packing up we moved in with Ollie and Annie Budd. They lived in a large, well-appointed farm house with the typical white stucco exterior and thatched roof. Ollie loaned me a small car to get around in and they put us up in

³ But recently, we received a phone call from an M.D. who said he had met Harold and Lily while traveling in Nepal. After that Vicky and I called Harold, who with Lily were living in San Diego. He had become a recognized author writing his autobiography and fictional stories centered in Pakistan.

one of their guest rooms. We enjoyed the few days we stayed there while having a drink over an open fire, and talking. They told us about living in Southern Rhodesia and Ollie's work with the police force. They also told us about helping to raise "Nicky" Price, now a famous golfer. Our last night there we saw a red glow in the sky. Going outside we could see a huge fire passing through the forest about a quarter of a mile away. Because of the large open field between the house and the fire they said they were not concerned. The next morning we saw that the fire had burned itself out.

The day before we left we stopped for lunch at Malandelas. It was a lovely day, warm for this time of year, with windows wide open. There were large swaths of grass areas surrounding us with the forests and maize fields off in the distance. As usual the place was crowded at noon time. And there was Farmer sitting at the head of a group of seven. Relaxed, although this was just his lunch break, I remember him ordering a bottle of fume blanc. I thought to myself, "What a life these people live." And here we were leaving.

Rather than fly directly home, we arranged to stop off in the Seychelles. With such fond memories of the place where we had stayed before, we booked six nights at the same beach resort. There is a saying, "You can't go back." And sometimes it's better if you don't. That had been our experience in Addis. The same thing happened to us at the Sunset Resort. The setting remained the same—the secluded beach where we swam and snorkeled, the setting sun past the rock protrusion, and the surrounding palm tress and shrubs. But now, the central dining room and the handful of cabins behind the beach had been removed. In their place was a modern set of buildings that clashed with the surroundings. The way the resort operated was even worse. The management seemed indifferent to us while the waiters were slow and inefficient. Assuming we were at a place that catered to swimming and snorkeling, we asked about renting snorkeling gear. The clerk on duty said they didn't have any. We would have to go into town for that. And here we were paying \$400 a day. Vicky and I did enjoy seeing the Seychelles again, but where we had stayed had changed.

Now that an international airport had been built on the island we were able to catch a flight to London and thence to JFK where Becky and Tim met us. The next day the four of us went out to Long Island to see Bobbie and Norene. We visited Becky's small but nice apartment near Columbia University. We spent a day with Jim and Mary at their sumptuous layout with its swimming pool off their patio and their boat dock on the Bay. Finally, we flew to Denver, and drove a rental car to Fort Collins to resume our life there.

Chapter 17: Paul

My return meshed nicely with the beginning of the fall semester in terms of teaching and student advising. Aware of my return Byron Winn had assigned me the Engineering Economy course for the fall and winter quarters. Beyond that he expected me to cover my salary as best I could. I had hoped to return teaching "my" Projects Planning course, but found that the Ag Econ Dept had incorporated it into its regular curriculum and was reluctant to give me part of the teaching load. Figuring it was not worth the fight, I abandoned the idea of teaching the course again. Then, when I contacted Robin Cuany of the Soil and Crop Sciences Dept he said that he would be happy for me to help him teach the graduate FSR A550¹ course that he had inherited from Bill Schmehl. Besides teaching I soon found graduate students wanting me to be one of their advisors. For most of them I would be a committee member. However, I was the principal advisor for Web Jones, a bright Civil Engineering student working on his master's degree that focused on municipal water supply. This interest was appropriate, since he was the manager of Elco, the company serving the East Larimer County Water District.

I knew that Byron expected me to do more than teach and advise, which suited me fine. So I began searching for more funding. I already had some coverage from Winrock for the three modules for FSR that I had begun writing in Swaziland. And Jim Meiman said he could cover part of my salary if I were to edit a report on the history of CSU's involvement with Egypt's Irrigation System. He had already selected Dave Freeman (political science), Ramchand Oad and Terry Podmore (irrigation engineering), Jim Ruff (civil engineering), and Jim Layton (sociology) to write sections of the report. My task was to put it together. To augment these sources I began letting others know I was available. When Tom Sheng asked if I were interested in the proposal he was sending to AID about irrigation in Nepal, I said I was, as I did with Pepe Salas who suggested we collaborate on proposals concerning large-scale irrigation in Peru; Marvin Jensen, an irrigation specialist, asked me if I were Interested in a Monitoring and Evaluation assignment in

¹ 500 courses are at the graduate level.

Bolivia; and Chemonics, for whom I had worked in Pakistan, asked if I were interested in being the Chief-of-Party in Egypt.

I pursued other professional activities, as well. I continued on the draft about small-scale irrigation in Sri Lanka. Hoping to upgrade the rigor of my analysis I contacted Jim Brennen of the Stat Dept on h ow to analyze samples of unequal sizes. In October I took a few days off to attend an FSR meeting at Michigan State Univ. There, I met Pete Hildebrand, Dick Harwood, Rick Bersten—my FSR contacts, Dam Dlamini, Ted Stillwell from South Africa, and George Axinn, a prolific writer on rural development in the third world. While several recognized me as the principal author of the Guidelines, most participants were more interested in those FSR pioneers who were also attending the meetings. This was not a disappointment, only unexpected. Pete was his usual friendly self. Finally Tim Shilling of the Univ of Nebraska contacted me about their funding of Sebe's PhD.

As for our children, Becky was about to give birth to their second child, Tim was working as a secretary for Architectural Digest in NYC, Mike was assistant pro at La Quinta, and Paul was caddying for Rocky Thompson on the Seniors' Tour. Shortly after our return Paul called to say that Rocky had won a tournament in Syracuse and that his share of the winnings was \$6,000. Six weeks later, Paul was headed to Honolulu for the Kaanapali Classic. Mike, expecting to "pick up a bag" planned to join him. They hoped to stay with John Brodie's son whose father would be playing in the tournament. They had gotten to know the son and father at La Quinta. On Sunday, Dec 15th, Vicky and I tuned in to the Seniors' tournament in Puerto Rico in the hopes of seeing Paul tending Rocky's bag. But Rocky was out of the running. In fact, he finished last! With Paul's caddying over for the season, we began talking about getting Paul to come to La Quinta for the holidays.

Three days later Vicky and I got that dreaded 4:00 a.m. call that no parent wants to hear. Detective Duran on the phone from Palm Beach asked if we had a son named Paul who might be in the area. By now both of us were wide awake. I said, "Yes, we do" then he said that Paul

had *expired!* Later, we learned that Rocky had fired Paul hoping this might change his luck. Paul had flown back to Palm Beach where he sought out Luke whom he had known when they were "bag boys" at the Citrus. We also learned that Paul and Luke had gone on a bender making the rounds of many of the bars in town. Their drink of choice was Sambuco and beer. Regular boiler-makers! Along the way they met Luke's friend, Howard Hoffman, who told Paul about opportunities for investing in the many restaurants opening up in the area. At one of the bars, Howard introduced Paul and Luke to a middle-aged guy named Michael Peterson. Eventually, they ended up in Howard's kitchen continuing to drink, possibly snorting cocaine. The account we heard was that Peterson took offence at something Paul had said, pulled out a kitchen knife from the drawer behind him, and stabbed Paul in the chest. Paul died within minutes. Later, during Peterson's trial with his brother as defending lawyer we felt that the name Peterson was an alias because neither one of them looked Scandinavian. We suspected they were Mofia!

Tim and Mike came out for the funeral and so did Rocky Thompson, but Becky was about to deliver so she couldn't. Vicky, the two boys, Dad, and I had an early dinner. Then Rocky came over and stayed for a couple of hours to talk about Paul. He said that Paul was the most popular caddy on the Seniors' Tour, the wives thought he was great, that he didn't carouse. As for drinking, he had seen Paul turn down a bottle of Scotch, saying "I prefer beer." He said that he had observed Paul when he was caddying for Doug Sanders who was one of the more popular pros on the Tour at the time. He liked the way Paul didn't show disgust when Sanders wasn't playing well, accepting the fact that his earnings for the week would be modest, and how Paul handled the crowds. He was polite yet effective when asking the crowd to move back so the player would have room to play a shot. So, when Sanders retired from the Tour, Rocky was quick to ask Paul to caddy for him.

Not long afterwards Vicky and I received the following letters:

I can't tell you how shocked and saddened we were to hear of Paul's tragic death. We had just spent some time on the beach in Hawaii with him and Mike, who had caddied for John in that tournament.

Paul was a very friendly gentleman—he always had a "hello." I think he was very wise in his understanding of the pros and their idiosyncracies and always handled himself well. . . . We can only remember the happy times and his love of life. He did see and do a lot. Our prayers and thoughts are with you both. Sincerely, Sue Brodie.

You already know how well your son Paul was liked I have know him as a happy go lucky, polite young man who always wore a smile, especially when Rocky was in the hunt We along with his friends have even shared a few beers after work. . . . We last spent time with Paul in Hawaii on the beach. He came down to play football in the water with some of the pros and a few friends. It was a fun day, warm with sun and laughter, that's how I will remember him. With a sad heart, Karen Rogers.

My husband, George Archer, plays on the Senior PGA Tour. This is the reason I knew your son, Paul. Paul was my friend, someone whom I loved, a young man I spent time with. Whenever the golfers were through play for the day, and the wives and caddies waited around while the pros practiced, and Paul was there, we would talk and laugh and share our time. Paul stood with me in Los Angeles while we waited for the playoff. He encouraged me and rooted for us, generously. In Hawaii, we laughed and shared a joke. Paul had twinkling eyes, humor just below the surface. In Puerto Rico we wished each other a Merry Christmas and said our goodbys for the season Seeing Paul made me happy. I loved him like a son, and in fact, he reminded me of my sons-in-law. I was devastated to learn of his death Yours in sorrow, Donna Archer

Somehow we got through the memorial service at St Luke's and the weeks that followed. But it wasn't easy. Then, thank god, Ken Nobe, former head of CSU's Ag Econ Dept asked if I were interested in a three-month assignment in Indonesia beginning in February. I jumped at the chance.

Chapter 18: Indonesia

Indonesia is a big, interesting country. When we went there in early '92 it had a population of 180 million, the fourth largest in the world behind India, China, and the USA. Its Muslim population, though moderate, was the largest in the world. Buddhism and Hinduism played only minor roles in the culture. Thousands of islands make up the country. Java, one of the major island groups, is one of the most densely populated areas of the world, except for small, city-states such as Hong Kong and Singapore. Favoring agriculture is an expansive irrigation system complemented by a well-distributed annual rainfall of a hundred inches. These conditions favor the production of rice, which is people's staple food. So large is the country's *per capita* consumption of rice that it exceeds that of China, India, Thailand, and Bangladesh.

Indonesia gained independence from the Dutch in 1949. The next fifteen years were marred by high inflation and little growth. In 1969 the government embarked on its first five year development plan, called *Repelita I*. The five-year plans continued for the next 25 years. During this time, the country prospered though the exports of oil, gas, rubber, palm oil, and manufactured goods such as shoes and textiles. Given the preference for rice, promotion of agriculture became a prominent part of these five-year plans. To help improve and stabilize yields the government invested considerable amounts in irrigation infrastructure. Financial and technical assistance support came from the collaborative effort of the World Bank, the Asian Development Bank, and bilateral donors such as Holland and the USA. Besides funding, the World Bank periodically prepares Agricultural Sector Reviews, and the ADB has helped both funding and technical assistance through the Irrigation Sector Support Project.

The project that Nobe contacted me about was to produce a study intended to help Indonesia's National Development and Planning Agency, BAPPENAS,¹ concerning the irrigation component of *Repelita VI*. Criticism of previous *Repelitas* referred to uneconomic investments in water resources that produced a drag on the economy. Our study was intended to guard against repeating these mistakes.

Ken Nobe, through his firm Resources Administration and Development International, had won the bidding for the project called the Water Resources Investment Strategy study. He was now in the process of assembling a four-man team whose charge was to do an

economic analysis of alternative projects that would be followed by developing procedures for linking economic efficiency criteria with national objectives, i.e., rice and food self-sufficiencies and maintaining employment in rural areas. Competition for water between agriculture and other uses, particularly on the island of Java was to be examined. Implications of the methods developed for making investment decisions on policy formulation and refinement would then be examined followed by recommendations.

More specifically, our team was expected to project supply and demand for food, recommend ways for improve the efficiency of existing infrastructure and water management practices, identify areas for further expansion of irrigated agriculture, suggest ways for maintaining rice self-sufficiency, examine economic soundness of projects targeted for the eastern islands, look at crop diversification, and consider transmigration to less populated areas. The Government of Indonesia considered this last item important as a means of lessening the population pressure, primarily on Java. USAID was funding the project and Winrock International would oversee our work—a strange arrangement, I thought, because AID usually took on this responsibility itself.

¹ The acronym comes from the *bahasa* wording.

Perhaps, the size of the Mission's program in Indonesia coupled with Winrock's long history of working here were the reasons.

Ken would liaise with Ali Rahman, Head of Agriculture and Irrigation, a Bureau within BAPPENAS; Hank Knipscheer, Winrock's Director of the Asian Division; Haider of AID/Jakarta; and someone from the Bureau of Public Works. I thought this ought to turn out well, since Ali received his PhD in Ag Economics at CSU when Ken was the Department Head; and he had taken my projects planning course. I remember him as a modest, cheerful guy. Alan Early, an associate professor in Ag Engineering, was to work with a model ADB had set up to estimate incremental costs per ha of producing an additional ton of paddy (unmilled rice) from alternative types of irrigation investments. In other words, given the objective of rice production, the intent of the model was to rank incremental costs by type of investment. Alan was a practical guy who knew irrigation well. Many years ago Alan and I had talked at length about our mutual interests in economic development. He came to CSU after a stint with the Peace Corps. Gerald Nelson, an assistant professor in ag economics from the Univ of Illinois, Urbana-Champaign, would cover the macro-economic side of our project. For this, he would rely on a model that BAPPENAS had developed.

As the project evaluation specialist I was charged with employing a process for ranking project alternatives based on multiple objectives specifically for *Repelita VI* and generally for the 25-year planning period. Ken, Alan, and Gerry knew Indonesia from having worked here before: Ken in collaboration with Bob Young and Dave Seckler, Alan when he was with the Peace Corps, and Gerry on other assignments. Consequently, Alan's and Gerry's knowledge of *bahasa*, was an advantage in getting around, reading reports, and gaining the respect of those with whom we would be working. I was definitely at a disadvantage in this regard.

Assisting our team in Jakarta would be Ty Sugianto, an agricultural economist, and Hidayat Pawitan, a geophysicist, both lecturers at the Bogor Agricultural Univ, and Mohammad Haider as irrigation policy advisor. How these two Indonesians would help us would be determined once our team had arrived. Haider's roles were overlapping: one as a member of our team and the other as our official contact with AID. At times these two responsibilities could be conflicting. As if that were not enough, Haider had been a member of Clyma's Water Management team when I was Clyma's chief lieutenant. I also leaned that Herb and Pixie were part of the AID/Jakarta Mission. If this were a family we could be charged with incest! Is it any wonder that Ken won this contract?

On February 23rd Vicky and I began our trip from Denver to San Francisco, Tokyo, and Singapore before landing us in Jakarta. Business class all the way. Alan Early, was on-board with us. What was nice about stopping at Singapore was just seeing this large, modern airport, as well as being able to check our luggage onto the next flight and to rent a day room where we were able to grab a few hours of sleep. Our flight to Jakarta was via Singapore Air, another nice experience: good food, free drinks, and attractive stewardesses. We arrived mid-morning and took a taxi to the sixteen-story Hilton Hotel close to the middle of town. This was where Ken had booked us a room.

We nearly lost our breadth as we entered the lobby. It was both large and elegantly decked out with large wooden rafters. On a small, tropically decorated bandstand opposite the entrance was a group softly playing their native instruments. Looking through large windows we saw a long veranda that faced an Olympic-size swimming pool. Beyond that were several tennis courts within the park-like area with palms, large ferns, shrubs, and flower gardens amidst winding asphalted paths. Next to the tennis courts was a two-story building that we learned housed a locker room, showers, a snack bar, and an office. Off to one side was a separate

pavilion that served local dishes. Later, we learned that the tennis courts were crowded from six to eight in the morning because this was the best time to play, before the heat of the day set in.

Vicky and I checked in at the desk hoping that we would be able to stay here, that our per diem would be large enough. The size of our corner room was ample, with two queen-size beds, two easy chairs, a writing desk suitable for my computer, ample lighting, and a breakfast nook with a refrigerator, which meant I wouldn't have to eat breakfast downstairs. Windows on two sides of the room meant we would have plenty of light during the day. Being on the seventh floor and with a small balcony we were able to view tall buildings in the commercial area close by. At night, neon lights outlined some of the buildings that provided an exciting panorama.

I left the unpacking to Vicky, rested for awhile, then met Ken and Alan in the lobby. Our project's driver drove us about two miles to the Ministry of Public Works located in a residential areas. Our meeting was a courtesy call mainly to introduce Alan and me to the chairman of the Steering Committee, our contact at Public Works, our two Indonesian counterparts, and Knipscheer. Thank goodness the meeting was short because my eyes were drooping from our long trip. Alan's must have been too.

Later that evening, Vicky and I met Ken, his wife Hazel, and Alan in the hotel lobby. Ken is a hulking, happy, go-lucky guy with a booming voice—the veritable bull in a china shop. Hazel was a perfect counterweight—petite and quiet. She was to be a nice companion for Vicky while here. Before dinner the five of us had a drink in the large, open lounge at one end of the lobby where most of the tables and corner seats were occupied. Off to one side was a singer accompanied by a pianist. It wouldn't be difficult working here. Our table talk had little to do with work.

The next morning we returned to the Dept of Public Works where our contact assigned us a tiny office with four small desks, a photocopier, a phone, and a bookcase. It was so cramped and the chatter so disturbing that I found it hard to concentrate. Soon I was spending most of my time at the hotel. We were just getting settled when there was a knock on our door. Rob van der Weert entered, introduced himself, and suggested we go to the conference room where it would be easier to talk. This turned out to be anything but a courtesy call. Right off, Rob, a carryover from the time the Dutch ran things in Indonesia, said he had learned the nature of our project from Ali Rahman, and was upset. He claimed that our project overlapped with his project at Planning for Integrated Water Resources Development that was being funded by the Dutch Government. He reported to the Dept of Public Works as well. He couldn't understand what was going on. He and his team were well into their work while we had not even started. So, "Why were we here?" Ken explained that BAPPENAS had requested the project, USAID agreed to fund it, and Ken's firm had won the competitive bidding. So, here we were. It looked as though we were in the middle of a power struggle between Public Works and Planning. What was not on the surface was the underlying resentment among many in the Indonesian Government toward the Dutch, who were slowly losing their influence here. When I returned to the hotel, Vicky told me that she had negotiated a rate with management that was within AID's allowance. Saying that we would be staying for three months helped her argument.

When we met with Rahman the next time I found him serious, focused, and exuding power, not at all like the way he acted when I had known him as a graduate student. Still, I thought he would be open, fair, but demanding. Someone not to be taken lightly. While we were talking, his phone range. Looking slightly annoyed, he said, "Send him in." Rob van der Weert walked in saying he needed to talk with him about his project, Ali cut him short saying "What's the problem?" When Rob started to answer, again Ali repeated, "What's the problem?" By now Rob was stammering to get his point out. Finally, Ali told him, "Look we don't have

to listen to you Dutchmen any more, nor are we dependent on your projects funding. If you do not like our decisions, I can arrange for you to leave the country." Chagrined, Rob turned and left the room, this ending the problems with Rob.

Our team devoted much of the next three weeks learning about irrigated agriculture in Indonesia. These included specialists at Public Works. One of these was K.V. Ramu, a water resources advisor with a PhD from CSU. He greeted me as an old friend. Ramu had taken my projects planing course and was now teaching the same subject using my text. Proudly, he showed me the locally printed version, all perfectly illegal. I was glad that he found the book useful. We met Suzanne Siskel of the Ford Foundation, David Jezeph of FAO, and ADB administrators. We talked with the chief-of-party for Harza, a US engineering firm doing work for Public Works, and with David Seckler about his work here and what reports to read and which consultants to meet. Another of our contacts was Jan Gerards, who had received his PhD in civil engineering at CSU. After graduating, Jan eventually came to Indonesia to set up his own consulting firm. With his Dutch background he figured he would have lots of contacts among his countrymen who had remained here. Ken checked in with Pixie about how the AID Mission operated and how that might affect our work. Of course, we had regular contact with Haider and Knipscheer, but Ken wanted his own inside sources. It was a busy time for all of us reviewing our notes, gathering and reading reports, and for me familiarizing myself with the country.

By now we had gained lots of information on policy issues and irrigation investments. Perhaps a quarter of the reports were in *bahasa*, which were of little use to me at the start. But before long, I was able to make use of the tables once I learned the meaning of the headings. Then, Ken called us together to talk about how we might approach our work. Based on this meeting he prepared an outline for our final report and assigned writing responsibilities to each

of us. Although, Haider was technically a member of our team, he had no such writing responsibilities; nor did Ty or Hidayat.

We were now ready to continue on our own. At Knipscheer's suggestion I went to Bogor, a short drive south of Jakarta, to meet Dr. Effendi Pasandaran who was on the Steering Committee. As Director of the Center for Socio-Economic Research Effendi was held in high esteem. He spent several hours giving me the background to our study and said what he hoped we would accomplish. He also mentioned the upcoming two-day workshop in Bogor that he would chair. He said the workshop should allow plenty of time for our team and the Indonesian specialists to interact.

Nobe's contribution to our report would cover the broad subject of water resources development in Indonesia–past, present, and future. He came with an advantage because he and Young had already written about past events. So, his outline was pretty well in place; and it wasn't long before Ken began drafting the final report, leaving blank the sections for inputs from Alan, Gerry, and me. Our individual assignments were pretty well self-contained: that is, besides Nobe's work, Alan's was working on the implementation of the Asian Development Bank model and Gerry's was updating projections for the supply and demand for rice. As for me? I was still trying to figure out what to do and how to go about it.

For weeks I floundered, not knowing how to start. My mind was muddled over the scale of development in a country so new to me, so large and diverse, with so many investment possibilities described by those who knew the country so much better than did I. Just three years earlier, R.C.G. Varley of HIID² had written the definitive report, *Irrigation issues and policies in*

²Harvard Institute for International Development, the same organization that I might have worked for. See Chap. 6.

Indonesia. While the report provided me with good material, the extent of his knowledge about the subject intimidated me. What could I add? And, would what I did do be good enough? My discomfort reminded me of the early stages of our FSR study. Perhaps, I was still in shock over Paul's death. I had even arrived in Jakarta without briefcase or notebook. During our initial meetings I scarcely knew what to say. Even so, during this time of my confusion, I would sometimes break for a beer with Alan. We would sit at the bar by the pool and talk about our experiences overseas. These discussions helped me regain some degree of confidence. He even said I used the "Socratic method of questions followed by answers." Something I hadn't heard before, but took as a compliment.

Finally, after six long weeks, my thoughts began coming together. I settled on the type of analysis I often use: namely, description of investments, Rate of Return³ calculations, linkages with other sectors of the economy, and contributions to national goals. This was the easy part. The tough part was deciding what types of improvements I should consider. After reviewing my notes and scouring lots of reports I settled on seven possibilities. These were 1) helping establish Water Users Groups, "turning over" small-scale systems to farmers,' and establishing water-user fees), 2) implementing "efficient" Operation and Maintenance schemes, 3) rehabilitation and upgrades, 4) constructing new surface systems, 5) expanding or improving groundwater systems, 6) building or improving tidal and inland swamps, and 7) flood control. The next problem was finding data to make the calculations. Again I reviewed my notes and sorted through the many reports I had collected. I found enough information so that I could make the normal benefit-cost calculations, by making assumptions, or finding some other way to draw conclusions about an alternative. I also had to apply these findings to island groups. Ty,

³ Alternatively, Net Present Worth (NPW), which produces equal results when done properly.

was a big help in this regard. For each of the six major island groups⁴ he gathered and compiled data on many island characteristics: urban and rural population, per capita income, industrial and agricultural daily wages, farm labor costs by type of cropping activity, potential and actual paddy yields, number of months with adequate rainfall for rain fed agriculture, material costs, and so on.

My timing was fortunate because the two-day workshop in Bogor was about a week away. I was anxious to put my ideas to the test. Those attending, besides our team of four, Haider, Ty, and Hidayat, were about a dozen Indonesian specialists in irrigation, agriculture, climatology, and Effendi who chaired the sessions. Effendi did this with considerable skill by encouraging discussion, asking questions, interjecting his own thoughts, and for the most part keeping presentations on schedule. The exception was Alan's presentation. And this is where Alan and I fell out. Alan, infringing on the time allotted to me, went on and on about what he was doing. He described an approach that relied on the cost of irrigation investments associated with a per-hectare annual increase in paddy production. He planned on ranking the cost-effectiveness of eight types of investment for all 27 provinces of Indonesia according to either two or three technologies. (Later, I calculated that the eight tables showing his results would require over 4,000 entries!) I thought his approach was highly impracticable. My experiences at SRI with Sherm Clark over a civil defense study, the Harvard Business School, and David Seckler over M&E had brought me to my senses about the waste of time using this "mechanistic" approach. Even were he able to calculate an investment cost, this single value omitted the life of the investment, O&M costs and farmers' inputs. Why these shortcomings never surfaced during our study I do not know. I guess each of us was too focused on his own

⁴ Java & Bali, Sumatra, Kalimantan, Sulawesi, Nusa Tenggara and Timor Timur, and Maluku & Iryan Jaya.

part. But, what about Ken's role as team leader? Losing patience, I cut in on him so that I could ask questions central to my part of our study. After that, our friendship took a hit because I didn't like what he was doing.

On the way back from the workshop Vicky and I visited many of the small roadside stalls where craftsmen were making items for sale that included a small foundry, wood carvers, and weavers. Of particular interest to us were the wooden puppets with their grotesque faces and long sticks used to control their movements by those behind the screens of the small, portable theaters. Bargaining as is the custom, Vicky bought two grotesque puppets.

A week later, Alan left having spent just two month in Jakarta, as compared with our planned three- month stay. Vicky and I had gone to his room the day before he left. Papers were strewn all over the room and he was typing furiously apparently trying to finish as much of his report as he could. He had a robe wrapped around him and he alternated between chills and the sweats. He was having another one of his malaria attacks. We wished him a safe journey and hoped to see him back on-campus. I was trying to make amends for our minor confrontation at Bogor.

When I finally got around to reading our final report, I was impressed by what Alan had accomplished concerning the *components* of his "mathematical model." He had culled lots of good information through his interviews and the reports he had read on commonly accepted values for rice production associated with different types of irrigation investments; and he had written this up clearly. *He knew irrigation!* But, in the end, he was able to produce only 49 of the 216 targeted values; and these were for investments in swamps and pumped irrigation, the least important of the eight technologies he had chosen to investigate. But the *coup de grâce* had already happened during the workshop, which I didn't realize at the time. In our final report he

writes. . . severe data limitations became apparent [concerning the model]. Therefore, we eventually concluded that, given the data problem, further meaningful analysis of physical irrigated rice response capability in Indonesia was not possible at this time. So, in the end, what did he contribute to our study? Aside from his projections of rice production under various assumptions, it was demonstrating the futility of the excessive detail embodied in the ADB model.

Now, with the assurances I gained at the workshop, I could concentration on the seven investment types I had selected. I would review my notes, study the reports, and gather additional information as needed. Once back in our room at the hotel, for this is where I was working now, I wrote an introduction for my part of our report and described the method of approach I would follow. That is, for each investment type, I would describe the activity; estimate the cash flow; calculate the Rate of Return or NPW; comment on goal attainment and water- related issues, discuss the ease or difficulty of implementation, and draw conclusions. To put some order to all my notes that I had made and the reports I had gathered, I divided them into perhaps 15 groups and placed them on the extra bed in our room. Then, one by one I planned to make the calculations, consider the results, and write. I thought the approach manageable. Yet, at the outset, I had too many thoughts in my head. I would start to analyze or write on one subject, have an idea about another subject, search the piles for more information, and often, not finding it, I would throw my hands up in exasperation and go to bed, only to wake up in the middle of the night to jot down an idea or two. The next morning I would start searching anew—the same old story as with many of my other assignments. But I trudged on, and as I completed each segment, I could cross it off the list and take up the next. As the piles diminished I began to calm down because I had fewer investments to consider and I had something down on paper.

Each time I finished a section I would hand the draft to Ken who would then type the final report all over again including the part I had just given him. I am not sure Ken looked critically at any of my drafts because he seldom suggested any changes. Nor did I know what Alan or Gerry were submitting to him, or what Ken was writing. Apparently to his way of thinking it was unnecessary for us to meet as a team to share ideas that might improve our own analyses. Our work was purely *multi-disciplinary*, not the *interdisciplinary* approach used in FSR where disciplines interacted with each other. I never knew what the others had written until writing this chapter. Strange!

In the end, I was able to write enough on each of the seven investment possibilities that I thought would help BAPPENAS in deciding about them. Where I did not have sufficient data to calculate the Rate of Return, I treated the subject qualitatively. I limited the contributions to national goals to rice and food self-sufficiencies, and regional equity thereby omitting others such as crop diversification, stability in foreign affairs, and balancing the water needs of agriculture, industry, and municipalities. Besides, independence in foreign affairs revolved largely around rice self-sufficiency and did not need to be addressed separately. And, crop diversification could be subsumed by food self-sufficiency. I left out these "lesser" goals because I wanted to keep my analysis as concise as possible.

Following are excerpts from what I wrote

Farmer Associations

Generally, the benefits from support for farmers' associations relate to those attributed to private sector efficiency versus that of the public sector. Benefits accrue directly to the beneficiaries. . . . Because, through Water Users Associations, farmers will manage these systems, they can be expected to pay more attention to system operation, provide maintenance in a more timely manner, etc.

But the foregoing is speculative As a minimum, progress should be monitored closely and the findings fed back into the Government's program . . .

Rate of Return: No estimate is possible, simply because benefits are so uncertain. However, given the nature of the costs, the favorable timing (if the learning curve is short), and the divisibility of expenditures, supporting this type of activity ought to stand high on the list of alternatives. This is assumed to be the case because of the general nature of the cash flows; not because of conclusions based on reliable data.

New Construction

Unlike the preceding categories, which provide some breakdown of activities within an investment category, new construction is simply shown as a single lump sum. Consequently, existing summaries do not lend themselves easily to the association of costs with a particular activity.... However, given the nature of new construction, it seems safe to assume that weirs form an important part of the total activity.

New construction ranks as the leading category in terms of the Public Work's irrigation investment budget, averaging 34 percent of total expenditures during the first four Repelitas and ranging between 35 and 42 percent of the Repelita V budget.

Table VI.9. Comparison of NPW of Alternative Sizes of Weirs, using an Assumed Yield Increase of Four Tons per hectare per Year.

<u>Scheme</u>	Size of Scheme, ha	NPW, millions of Rs
Nanga Danau	490	4,210
Sibayu	780	3,540

Bakung & Tutiling	1,500	660
Batang Teso	4,980	- 1,420
Bila	9,510	- 7,670

Tidal Swamps

The Government saw the development of tidal swamps as a way to simultaneously support the transmigration program and increase food production by reclaiming unused land. . . . Most of the tidal swamp development centered on Sumatra and Kalimantan

This program follows a two-staged approach that combines low inputs with low technology. For the initial construction stage, the Government builds drainage canals, installs a few minor structures, and clears part of the land.

On the surface, these figures . . . suggest an acceptable profitability because of the low investment cost and the relatively short time to bring the new systems into production. . . . To date, however, the swamps program has had more than its share of problems. Overall paddy yields have been only about one ton per hectare and the area under cultivation is sometimes only one half that provided the farmer by the Government. Toxic soils, labor and capital shortages, and lack of infrastructure have been cited as reasons for the poor performance.

Despite what I have already said, all was not hard work. Shortly after our arrival in Jakarta an Admiral who had befriended Alan when he was here with the Peace Corps invited us to his residence about an hour's drive from Jakarta. Getting there was a delight. The winding two-lane macadam road was not heavily traveled. Along the way we passed by lush green shrubs, hibiscus, and roses. In the distance were expansive hillsides with terraced rice fields. The Admiral, who looked too young to be retired, was gracious in showing us around his estate.

He was proud of the kiosk in the midst of a large flower garden. He told us that when sitting there after a busy day, he was able to regain his serenity. A servant brought tea and we continued our discussion. After dinner we returned to the hotel in the dark.

Vicky and I enjoyed the large pool adjacent to the lobby and occasionally I jogged on the winding paths. The Nobes invited us for drinks and dinner at the executive club, a building located at the far end of the Hilton compound. From there we could see a high rise building, belonging to the Hilton, where those on long-term assignment could rent condos. Besides these possibilities were a Chinese restaurant whose makeup reminded us of the floating restaurants of Hong Kong, a first rate Japanese restaurant, and a pizza parlor. Inside the hotel itself was a restaurant for elegant dining. Next to the main lobby was a large, unpretentious restaurant that offered good meals and fine service. When I was in a hurry, this was where Vicky and I went to eat. We soon grew fond of the Indonesian noodle and rice soups—nasi goreng and bakmi goreng⁵ that were regularly on the menu. Occasionally sitting near us would be two Americans who looked to be in their seventies. Eves drooping, we concluded they were consultants and wondered why anyone would be willing to hire anyone this old. Summing up, there was enough to do, with such variety, that, if it weren't for work and were we so inclined, we could spend our whole time within the periphery of the hotel. But that didn't apply to Vicky. She and Hazel would explore the city more to sight see than to shop, although the multi-story shopping complexes were a sight to see: banks of up and down escalators crowded with well dressed Indonesians for the most part. And there were the major international hotels. One of their favorites was the elegant Hyatt where they liked to go for lunch.

⁵ Google shows *Nasi goreng* as meatball soup. But my recollection is that it was rice-based. In any case, the noodle-based *bakmi goreng* was my favorite of the two.

Herb and Pixie invited us over for dinner a few times and one weekend we went to their rented condo at the Northwest tip of the island. On the way there Herb pointed out the high-water mark on the hillside caused by a tsunami many years ago. Their condo was right on the waters' edge with their own grassed area that led to a sandy beach. The famous volcano, Krakatora in the Strait of Sunda, was not far away. We swam, read our own novels, talked with a friend of theirs who they invited for the afternoon and dinner, explored the nearby village, and just had a good, relaxing time. In gratitude Vicky offered to baby-sit their two adopted children while they went out for an evening. Returning from one of these outings, Herb hailed a passing taxi and give instructions to the driver on getting Vicky back to the Hilton. All seemed to go smoothly until the driver passed the turnoff to the Hilton. Vicky tapped him on the shoulder pointing to the hotel. But the driver, who knew no English, proceeded to circle back towards the center of town. Vicky wasn't sure if he was trying to run up the bill or truly didn't know where he was going. After awhile Vicky noted area they were in becoming darker and began to worry. She didn't know quite what to do. Then, she saw a police station; and when the driver stopped at the nearby intersection she opened the door and got out. A policeman at the station helped her hail another taxi whose driver knew how to get to the Hilton. She made it home without incident, although the experience rattled her. But there would be another time.

Not long after this last incident, Pixie told Vicky that she would be going to Jogyakarta on AID business in a few days and thought she might like to meet her there. Jogyakarta is located southwest of Jakarta not far from the southern coast. They could visit the markets together and Vicky could sightsee. The place was an outstanding tourist destination that included the ninth century Buddha monument at nearby Borobudur. Vicky thought this was a good idea and took the short plane ride there. She found the tour of the monuments and temples of particular interest. The guide there told Vicky that although the perforated stupas where the Buddha statues were seated were in good condition, restoration was still going on. He told how

piece by piece the missing stone blocks were being chiseled to exacting dimensions and put in place. Vicky climbed the ramp of one of the rock structures and found that she was in the middle of a plain with mountains in the background. The next day Pixie, who had time off, went with Vicky to visit the market and some of the galleries of Javanese fine art. That evening the two of them went beyond the city limits for a performance given by a troupe of puppeteers. After they had arrived at the theater Pixie said she couldn't stay but that Vicky could get back to town on one of the buses lined up at the entrance. Vicky enjoyed the show with the large brightly dressed, wooden puppets with their fiendish faces "dancing" about the stage. When the show was over the large crowd who looked to be part of a guided tour bordered the waiting buses. When Vicky tried to board one after another each driver said the bus was reserved his tour group. By now the theater was closed and the attendants gone. Vicky was entirely alone, except for a few peddlers with their rickshaws.⁴ One of them politely addressed her saying he could peddle her to her hotel, a distance of about five kilometers. Realizing she had little choice, Vicky accepted the offer without haggling over the price. The first part of the ride was through the countryside. After what seemed to be a long time, they approached a residential area where it was dark as well. She had no idea where she was, or if they were going in the right direction. She wondered if the driver were headed for some secluded place where he could rape her. She felt defenseless. Fortunately, he was an honest fellow who delivered her through the gates to the hotel. Continuing up the path the driver was greeted by other peddlers then welcomed by the doorman. With a great sigh of relief Vicky paid the peddler and went inside.

With our report nearly completed, Ali scheduled a workshop where we were to present our findings before some 50 attendees. Seated in the center of one side of a large square, Ali directed comments following Ken's, Gerry's, and my presentations. The way he controlled the discussion revealed to me his skills and power within the Planning Board. He kept the questions

⁴ These are small two-wheel carts, with a covering that can seat two, attached to a bicycle.

on-point and supported us the few times it was necessary. Jan Gerards was one of the more vocal ones during this discussion. Rather than challenging our report, Jan addressed ancillary issues that sounded as though he were hoping to receive funding from *Repelita VI*. Haider and Knipscheer gave us no trouble. As we were leaving, Ali told Ken that we had been on-track throughout our study. Coming from Ali, that meant something. This support for Ken may have been influenced by the high regard many Indonesians held for him. Back at the hotel, Ken, Hazel, Vicky and I celebrated over a beer. Because I still had corrections to make, I left them and returned to our room.

In the end Haider played only a small role in our study, even though he was allocated two months of coverage--the same amount allotted to Alan. Aside from meeting with us occasionally at the outset, his major participation occurred at the Bogor workshop. But there was a reason for his frequent absences. About midway through our stay, Haider came to our office looking worried. He said he thought his family had been poisoned. He said that when he returned home the previous day he found his wife and two boys standing outside the house. Someone at AID had arranged for the house where they were staying be fumigated without informing him or his wife. Apparently fumigation was new to the workers because they had applied the spray without diluting it! Once the job was finished the family went back into the house only to find the fumes unbearable. Haider immediately checked himself and family into the Hilton. The next day, they flew to the States so that his brother, an MD, could check them out. Sadly, they learned that the younger of the two boys had suffered nerve damage. Haider still seemed distracted when we saw him after his return. He made an effort to inject himself back into our work, but by then it was too late.

The next evening, we invited Herb and Pixie to dine with us at the hotel's finest restaurant. The day after that Vicky and I were off to the Thousand Islands to stay in a resort set

up by the Japanese for their people and Indonesian officials. Because of our work for the Government, we were eligible. On the way to the marina we passed rows upon rows of shacks situated on the edge of a drainage ditch that emptied its murky contents into the sea. That was our first exposure to such poverty in Java. Our launch ride to the Pulau Sepa Permai, took us out into the open sea for a couple of hours before finally docking us at the resort. The main building and separate dining hall were unpretentious. The rustic nature of the place suited us just fine for it matched our romantic image of a tropical isle. To get to our cottage we walked about a hundred yards along a dimly lit path bordered by tall coconut palms. While our accommodations were modest, the sheets were clean, the food was good, and the snorkeling was superb. The dock in front of the lodge gave us easy access to the clear water below where we saw an abundance of tropical fish and swarms of sea anemones darting in and out of brightly colored coral.

Our two nights at the resort passed quickly. Then back to the Hilton to collect our bags, say goodbye to Ken and Hazel, and take the two-hour trip to Denpasar, Bali. We spent five nights at the Nusa Dura Beach Hotel, a top-of-the-line resort located six miles from the international airport. Normally, we try to avoid such places; but, after all the hard work Vicky thought I deserved it. The hotel itself was fabulous with expansive central facilities, covered walks, a large piano bar, a library, and fine food. What I remember most is the gigantic, irregular swimming pool with a bar in the middle and bordered by palm trees. The hotel's beach front was unimpressive. We hired a driver and taxi for the whole day. We wanted him to take us to the many Hindu shrines, monuments, and historical sights close to town. The last night Vicky and I sat with others near the pool to watch a Bali opera. Before we knew it, we had to leave. What we saw here did not match our image of Bali as an exotic get-away. Nevertheless, we were happy with our choices.

Our trip home took us to Singapore where our bags went automatically into storage during our overnight stay, then to Taipei. While waiting to change plains we bumped into David Daines, our friend from Logan, and finally to Palm Springs. We spent a week with Mike, which gave us a chance to see Jackie, again, and for the head pro where Mike was working as assistant pro to give me a free lesson. After the lesson, he asked Mike, "Can't your father take the club back further on his back swing?" Mike's reply, "Guess not. He's always swung like that." We finally arrived home after having been away 3-½ months.

Chapter 19: Pakistan Revisited

On June 27, 1993 Vicky and I landed in Bangkok on our way to Lahore. This was another of our favorite stopover points. What made this stop so nice was how close the Amari Airport Hotel was to the terminal. After checking our baggage for our flight the next day, all we had to do was go up to the second floor of the terminal, walk a short distance to an enclosed overpass, go down to the first floor and there we were at the hotel's registration desk. The other airport hotel with similar features was the Sheraton in Frankfurt. I recall one of the marketing cases at HBS dealt with airport hotels. I thought that the idea would never sell because of the noise of planes landing and taking off and, because of their remoteness, the number of "guests" would be small. How wrong I was! But then marketing was never one of my fortes.

When we arrived in Lahore around midnight John and Kate Obst were there to greet us. John, an Aussie sheep breeder and the long-term director of an experiment station r in Western Australia, was the chief of party. Kate, his wife, was Scottish. John drove us through the pleasant looking neighborhood that boarders the airport. Soon we crossed a small irrigation ditch and arrived at 11 C/B New Muslim Town. As with the Gwinns they would provide us with room and board rather than giving us the per diem allowance. As was customary in fine neighborhoods such as these, the house was large with a walkout roof set within a modest-size lot, enclosed by a high wall and a *chokador* who guarded the gate to the carport.

John and Kate were several years younger than Vicky and I. John's forefathers were part of a group of Germans who had settled in Russia before migrating to Australia—the same as had those Germans who had settled in the Greeley area. He liked to joke that his were among the criminals exiled from the UK who had helped colonize the country. John was a husky fellow standing six-foot tall. Kate let us know that at one time John was widely recognized as one of Australia's better rugby players. Yet, he was mild mannered and religious. We hadn't been in Lahore long before he confided in me that he came to Pakistan because he wanted to help *save the world from starvation*. He was convinced that unless grain production were doubled in 15 years there would be worldwide starvation. He figured Pakistan would be a good place to start, given that wheat was one of the country's major crops. I soon learned that we viewed FSR quite differently, though he gave me the impression that he knew little about it beyond what he had read. He hoped that FSR was one of the ways to increase grain production, though not one of the best ways. Better, he thought, to rely on the advanced practices of rich farmers. Although Kate had come along with John as a dutiful wife, she told us that she enjoyed the adventure of living in Pakistan.

During my first few days John told me about the project and what was expected of me. I already knew some of this before accepting the assignment. I had read that in 1990 the World Bank had called for bidders on the Agricultural Research Project-II for the Punjab Province, which was a continuation of ARP-I that applied to the whole of Pakistan.¹ The intent of the ARPs was to improve agricultural research and extension

Pakistan's four provinces, Punjab, Sindh, Northwest Frontier, and Baluchistan, fiercely maintain their political independence from the Federal

thereby helping the rural population as well as the overall economy. The contract included \$8.7 million for specialists in livestock, horticulture, soil science, integrated pest management, training, planning, resource allocation, and M&E. CID bid on the contract, but lost to Australia's Overseas Projects Corp of Victoria. Because OPCV lacked the capacity to fill all the positions, it contacted CID and others for staffing help. CID turned to CSU and CSU's Director of International Programs turned to me for the position of resource allocation specialist. This was a stretch because the economists at CSU were more qualified to cover the many topics implied by this title. However, the fine print focused on the research-extension linkage in general and FSR in particular. For the latter, *I was qualified*. I might just as well have qualified for the planning and M&E positions, but was happy with FSR.

John introduced Vicky and me to the two other Aussies staying at the residence. One of these was Ralph Young, the M&E specialist. He was about my age, small, intense, and a vegetarian. The other was Neil Sturgess, an economist and planning specialist. I liked him right off because he reminded me of Tom Courtney at Harvard who had won the Olympic gold in the 800 meter. Expecting *some* type of physical prowess I asked him if he were an athlete of some sorts. To my disappointment he said he had other interests. Even so, we became friends sharing ideas and interests. Before long I became accustomed to hearing *mate* when referring to a friend.

government while accepting some degree of federal authority for national defense, foreign policy, and in the present case, research and policy issues. Of the four provinces, the Punjab has by far the largest in total output, including that of agriculture.

The next day John took me over to the Gymkhana Club, a carryover from British Colonial days, with its expanse of green grass, tall eucalyptus, outdoor track, swimming pool, tennis courts, dining room, and detached cottages. Robert Ayers Smith, the project's livestock specialist, answered the door dressed in a long-flowing cotton robe and wearing open-toed sandals. He was no youngster, of average size, stood erect, and was dignified as the British sometimes are. The windows were open as a ceiling fan circulated the warm air. He seemed oblivious to the heat. Just the aura of the man and the setting reminded me of what I thought Lawrence of Arabia might be like. Retiring from the World Bank after many years he continued working for them. Later, in a moment of confidentiality he told me that he had lowered his age on his passport so that he might be more acceptable as a consultant. Once when our group was dining out, he told our waiter to bring him tap water, rather than the bottled water the rest of us were drinking. That decision brought on a bout of diarrhea that put him out of commission for several days. In time, he told us about his wife who was well known in Australia's filming industry. Because he came across as being vain we called him *Bob Smith*, but not to his face. Still, I liked the guy and admired his expertise.

A day later John took me to the executive offices of the Pakistan Agricultural Research Board, where our project was housed. He introduced me to Shahnawas, the Board's Executive Secretary and John's counterpart. Shahnawas was a nice looking Pakistani of about 40 who was tall, and trim. He welcomed me to Lahore, ordered black tea, then asked about my trip. He said he was writing a book on economic development that he hoped would qualify for his PhD. He also practiced homeopathy.

Then he got off on a harangue about PARB members not having been paid for a long time. With that off his chest, he took us in to see his immediate superior. After that he introduced me to Munnawar, a senior PARB officer, who would arrange my trips and would accompany me on some of them. He was polite but showed little enthusiasm for the assignment. On the way back to our quarters, John confided that he was worried about not having established better relations with PARB. He also said that he was leaving it up to me to write *my own* work program. "Boy," I thought, "What have I gotten myself into?"

I had scarcely settled in when "Bob" Smith suggested that I might like to accompany him on his visit to the Livestock Production Research Institute at Bahadurnagar. Right off Bob jumped into the front seat next to Rafique, our driver, I guess so he could get a better view of the countryside. But getting to the Institute was not a walk in the park. The two-lane road we traveled was crowded with fast and aggressive drivers. Once at our destination Bob noted that I had brought nothing to drink. When I told him that I seldom get thirsty he chastised me saying that in this heat and humidity I could easily suffer kidney damage. So, I took a swig from his bottle just to make him happy. During this two-day trip, he talked with the Institute's scientists and we visited a few of their on-farm trials involving mostly buffalo and cattle. Extension

was not involved. The cooperating farmers, who were all well-to-do, showed off their

not involved. The cooperating farmers, who were all well-to-do, showed off their prize bulls. On our trip back to Lahore Bob sat as far back of the minious as he could! The lack of seatbelts made these trips even more perilous.

Five days later, Vicky and I flew to Islamabad where John wanted me to meet those with responsibilities for the Federal Government's ARP-II component. I found Islamabad to be a relatively new, well-planned city. The Federal Center that I visited was located on the edge of the city in a well-tended park-like area with lots of green grass, shrubbery, and trees surrounding modern low-rise buildings. Those with whom I met held senior-level positions, yet were friendly and responsive to my questions. Included were officers of the Pakistan Agricultural Research Centre (PARC), and Joe Nagy, DG of Social Sciences, an expatriate responsible for the Federal component of ARP-II and the Federal Agricultural Economic Research Unit (AERU). I also met two Hunting consultants responsible for forages and livestock. Taking advantage of some unscheduled time, I checked in with Cheema whom I remembered as a chubby, light-hearted follow who laughed a lot, whom I had met when here with the OFWM project. He was still that way even though he had risen to the rank of DG of Irrigation for the Punjab. That evening "Bob," took Vicky, and me to a pleasant, wooded hillock overlooking the city. It was a favorite picnic area enjoyed my many Islamabad residents. We enjoyed the cool breeze, walked along the paths winding through the trees, nodded to families coming our way, found a picnic table, and ordered shish kebabs and soft drinks.

The next day, I rode with Bob to visit the Livestock Research Unit at Kheri Murat located near Attock on the Indus River. We met with the Director of the Unit and the staff responsible for livestock nutrition, artificial insemination, range management, extension, and economics. Their laboratories, holding pens, classrooms, and auditorium were modern and well kept, revealing ample foreign aid. Bob effused over the buffalo he saw saying they were the best he had ever seen regarding production of nutrient-rich milk, use as a traction animal, overall health, and docility. When he would meet some weighty Pakistani, he would whisper to me, "He's been drinking too much buffalo milk." After making the rounds, we had tea, and talked. Walking back to our quarters after the sun had set one of the research officers told about his wife having died from a snake bite she had received on the very path we were walking. That caused me to crowd in a little closer with our group.

As I accompanied Bob on these two trips I got to know more about Bob's field of expertise. He was a good teacher. At times he would ask Nakkar Ali, his driver, to stop so that we could take a closer look at the fields and livestock. Pointing out the eucalyptus that bordered these fields, he expressed his dislike for them saying they drain water and nutrients from the soil. He also didn't like the attention some Pakistani specialists were paying to *mott* (an Elephant grass) because of its inferiority to other types of animal feed. But he did like the groves of leucaena we sometimes saw because the leaves provide a green manure and an animal feed rich in protein.

The following day we drove past groves of hillside forests that the government had planted as a means for soil conservation and regeneration. Finishing that part of our

trip, Bob and I separated and I rode back with the PARB veterinarian who had accompanied us to Kheri Murat. The ride back to Islamabad was not long, but it could have been my last. The traffic on the two-lane asphalt road was light, the terrain was flat, and the visibility was good. I was in no hurry to get back, but the vet feeling otherwise traveled around 75 mph. In an attempt not to think about our speed, I was observing the landscape out my side window. Then I noticed that we were slowly gaining ground on the car in front of us. I also noticed another car off in the distance coming toward us. Casually I watched as our two cars closed rapidly, assuming the vet would settle in behind the car in front of us to wait for the on-coming car to pass. But he didn't. Instead, he floored the accelerator. The driver of car we were passing maintained his speed as did the on-coming car. When it looked like we were going to crash head on, I instinctively jammed my foot on the floorboard as if to put on the breaks and closed my eyes preparing for the impact. Then, I felt a sharp move to the left and the sound of the on-coming car whiz by us. We had made it! This was the same pigheadedness that causes so many devastating highway accidents on the Trunk Road. On an earlier assignment I had ridden past the remains of two large buses there. I had also experienced a similar game of chicken when the Director of the DI Khan Research Station had driven me around to see some of his field experiments. He continually hogged the single paved lane thereby forcing all approaching traffic onto the dirt shoulder. Fortunately, we were never confronted by trucks or bus. Before long I was safely back in Islamabad, but badly shaken.

That evening Vicky and I dined with Kurt Walters, his wife, and daughter,

Cecile, in their home. As noted they had lived on the ground floor of our apartment

complex in Sana,a. Because of our Christmas card exchanges, we knew where they lived in Islamabad. Kurt was now AID's Program Director for all of Pakistan, which meant a nice promotion for him. It was a pleasant evening as we traded stories about what each of us had done since leaving Yemen. Cecile who was now a teenager was no longer the bubbly, light-hearted youngster we had known. Now, she was glum and acted as though she didn't remember us.

The next day I continued my meetings at the Federal Center. Joe Nagy was my contact again. He arranged for me to meet other Pakistan Agricultural Research Council staff including members of the FSR team, an economist from AERU Federal, the Director of the Technology Transfer Unit, Dr. Izuno, Winrock's chief of party for AID's Management of Agricultural Research and Technology project, and a statistician who

was providing expertise on MSTAT and SPSS.² I was impressed by the willingness of so

many to spend time telling me about their activities, how these activities related directly to ARP-II, and how much funding and technical support in agriculture Pakistan was

As a reminder AERU is the Agricultural Economic Research Unit, NARC is the National Agricultural Research Centre., MSTAT is the statistical package Sebe Matsebula applied to research trials in Swaziland, and SPSS is a widely used Statistical Package for the Social Sciences.

receiving. Now, I could understood better how our Punjabi project fitted in with Pakistan's effort at developing its agricultural sector.

Back in Lahore, I had a scant four days to consolidate my notes and prepare for the next trip: this one to Faisalabad where I was to have meetings at the Univ of Agriculture and the Ayub Agricultural Research Institute (AARI). John and Munnawar accompanied Vicky and me on this two and a half hour trip. Although one of the country's larger cities, Faisalabad looked more like an overgrown town. We checked into the beautiful Serena Hotel located in a nice residential area not far from the central business district. The hotel is one of the many hotels in Asia and Africa established by the Aga Khan's Fund for Economic Development. He had chosen Faisalabad because he wanted a place for businessmen to stay while carrying on their dealings with the textile mills. What I remember most about the hotel was its setting within large and manicured grounds, the elaborate copper-brass casings around the lobby chandeliers, and the good service and food, especially the petite grilled lamb chops. The one time the Aga Khan visited while we were there, the spread for breakfast was expansive. After his departure, the spread became normal again.

Later that morning Rafique drove John, Munnawar, and me to the University located at the edge of the city. We passed through the entrance into a tree-studded area with one and two story buildings scattered about. The place was quiet as though it were a retreat conducive to learning and meditation. Could be a school break. Munnawar, introduced John and me to the Chairman of the Econ Dept. After initial introductions and pleasantries we were joined by three faculty members, one of them being Dr Nayyar, an agronomist who was also Director of Agronomy at AARI, and a graduate student who

was studying the impact of FSR on local farmers. We talked awhile then agreed to my three-day program here.

I spent the first two days at the University talking with faculty about their work in FSR, research, extension, and education. I visited some of the "on-station" trials, including those with elephant grass. One small group said they were tired of FSR and wanted to go back to the old system by concentrated on research in their respective fields. At the end of the second day the Dean of Social Sciences brought out a copy of our Guidelines saying they were using this as one of their texts. A young faculty member sitting next to me asked me if I were the lead author. But before I could answer, the Dean butted in and said, "Oh no. That's just a namesake." Off to the side I whispered to the one who had raised the question that, "Yes, I was." But I didn't bother correcting the Dean, feeling it not worthwhile. It was just possible that had the Dean known, he might have wanted me more involved with their FSR program at the University. But at that point I was more interested in helping implement FSR than talking about it.

Munnawar stayed on to help me arrange my meetings and transportation and to act as interpreter when needed. He was never keen on being here in the first place, or accompanying me on other trips, despite Shahnawaz having given him that responsibility. Right off, he had said, "Just tell me what you want me to do. *I am your servant*." This statement captured what I was beginning to feel was the underlying problem. PARB had never bought into ARP-II, feeling it was *our* project, not *theirs*.

Once during one of my meetings I glanced over to see Munnawar dozing in his chair. Was he demonstrating his complete disinterest in what was going on?

I spent my final day in Faisalabad with Dr. Nayyar at AARI, located five miles beyond the city limits. Getting there from the Serena required our driver to slowly weave his way along the commercial district's narrow streets crowded with pedestrians, animals, autos, carts, rickshaws, and bicycles. The trip, which included many starts, stops and abrupt turns seemed a *journey of a thousand near misses* as those ahead of us would sudden turn one way or the other without signaling or looking back. But no one ever seemed to mind the chaos, not even the young ladies in their fancy dresses who one day were riding in a horse-drawn rickshaw facing us as we approached them from behind.

Once at AARI, Dr. Nayyar right off said that he didn't think much of ARP-II because its funding came late and he still hadn't received the promised vehicles. That out of the way, he told me about their research program, which included his *diagnostic surveys*, as required by the Master Plan. I thought, Good grief is this Clyma's influence? I hoped not because I found them mostly study and little followup. Nayyar admitted that their FSR program had not gotten off the ground. At this point, I concluded that here was where I ought to be.

Back in Lahore I reported to John about my time in Faisalabad. We traded ideas then I said that I would like to visit some of the regional Adaptive Research Stations,³

The task of researchers at these stations was to select and modify results from

Extension offices, and on-farm trials. Then, for the next eight days I read the documents

traditional research stations so as to suit local conditions. Once that is done researchers would collaborate with Extension's Subject Matter Specialists in delivering new technologies and materials to farmers by means of demonstration plots, field days, training, and consultation.

John had suggested, including the Government's Master Plan, PC-1s⁴, AERU reports, one of Nayyar's diagnostic survey reports, PERI's⁵ evaluation of Extension's approach to Training and Visit (T&V), and FSR reports. The FSR reports didn't impress me. I thought the authors were simply mouthing commonly-held concepts, rather than describing what had been accomplished.

As for my plan of work, here I was over a month into my stay and John and I still hadn't settled on what I should do, which I thought strange. In my experience in bringing short-term consultants on-board I knew *precisely* what I wanted from them. For example, our Tech Agency committee had met for a couple of weeks before deciding that we needed a specialist from the shipping industry. By the time he arrived, we had prepared a set of questions and suggested his contacts. After a day of briefings and orientation he was ready to begin work. Was John's situation so much different from ours in Ethiopia?

Still, I understood John's situation. He was confronted by a mountain of difficulties: PARB staff were perpetually on the verge of striking, Shahnawas was thinking of resigning his position, Ayub's DG was unhappy about the project saying that no outsider had the right to tell him what the research strategy of the Punjab ought to be,

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Typically, AID's PC-1s describe the nature of a program, its funding, responsible government agencies, target beneficiaries, procedures for data collection, and evaluation procedures.

⁵Punjab Economic Research Institute

PARC's chief operating officer and the World Bank representative in the Punjab were talking about closing down the project, and even John was thinking of throwing in the towel. I didn't know if this was dissatisfaction with John, PARB, or the project itself.

Despite these problems John did his best to help me develop my work plan. He thought about 1) forming a committee made up of PARB, PARC, AARI, the AERUs, nearby Adaptive Research Stations, and Extension to advise on what that ought to be; 2) having me work with the National Coordinating Group on FSR in Islamabad; 3) maybe I should lead a seminar on FSR at PARB headquarters in which he would invite the Secretary of Agriculture to attend; and 4) accept his fall-back position of limiting my contributions to giving a few seminars to PARB staff and writing a final report. Thinking the first three grandiose, I settled on the fourth and began gathering background information on ARP-II and how this project related to national and Punjabi objectives and strategies for agricultural research. But, even here, I found inconsistencies among reports by the National Commission on Agriculture, PARC's 12-year strategic plan, and the World Bank's Staff Appraisal Report for ARP-II. So, I gave up on this approach for the time being.

Sensing my frustration, Vicky said she was fed up with life here and wouldn't mind if we just up and left. I couldn't blame her. I felt was "pushing on a string" in my efforts to do something constructive about FSR. But the unexpected happened. I stumbled upon a statement that said Nayyar was the *principal investigator* for the Research-Extension-Linkages component of ARP-II. What a shock because my position within ARP-II was advisor to that component! *I should have been working*

with him in Faisalabad all along! Why had I been floundering around here in Lahore and Islamabad all this time? Didn't John know about Nayyar's responsibility under ARP-II?

But before Vicky and I departed for Faisalabad I wanted to see as much as I could about research and extension in and around Lahore, particularly what was being done in the name of FSR. Accordingly, I asked Munnawar to arrange some visits for me and him. Our first attempt turned out to be a fiasco! My driver, Nakkar Ali, showed up at 8:00 a.m. and I thought we were headed out. But Ralph decided he wanted to leave some reports off across town. Fifty minutes later we were back where we had started. Then we traveled along the canal road towards Niaz Beg. Again, I thought we were on our way. Instead, we were at PARB headquarters in Lahore. Munnawar said he wanted to make further arrangements for our visit. For me, Ralph, or what? I begin to fume and Ralph got vocal. Then, Wasim, Munnawar's assistant, intervened. On the side, he confided that Munnawar never intended to go to the field. Nor did he think much of other senior members of PARB. I think I had a rebel on my hands. But at least this bright young fellow appeared to be on my side.

Using his contacts Wasim arranged for several trips. The first of these resulted in a good session with the Director of Extension for the Lahore region. He described their extension program, yet made no reference to FSR. Further, he disappointed me when he claimed that his main problem was that he needed the funds to provide incentives to farmers, as though farmers would not accept Extension's suggestions

without receiving direct financial benefits. Apparently, technical advice was not enough.

I told Wasim I was still looking for evidence of on-farm trails. He said he knew two SMSs (Subject Matter Specialists) at an Adaptive Research Station near Gujaranwala. So, off we went the next day. I didn't know what to expect. But; what the Specialists showed me was disappointing. Going through the gate to the farm we saw a large two-story house still under construction. Seeing it, I thought, "My god, he's building a mansion!" The owner was well-dressed and, in fluent English, told us he owned 70 has⁴, including a mango grove and several buffalo. This farmer had to be one of the leading farmers in the area, I thought. The Specialists must have misread the purpose of my visit, which was *not to see someone like this, but to see evidence of an FSR program serving small, limited-resource farmers*. I still had a ways to go with Wasim before he would understand. I began to wondered if *anyone* at PARB understood the essence of FSR.

The following week, Wasim came by 11 C/B to tell me he had learned about several progress reports produced by another of the Adaptive Research Centers. When we met with the Director, he told us that the reports didn't exist. He said that ten years earlier the Center had, indeed, written about their research program. But the World Bank representative for their area hadn't accepted them without major revision, which they never bothered to make. He went on to say that they no longer do farm budgets,

⁴ Huge, considering many peasant farmers get by with just one or two hectares.

economic surveys, or anything even closely resembling FSR. So far, I had drawn a blank.

Then, on his own, Wasim arranged for us to visit the Extension office in Kasur, south of Lahore on the Indian border, a town where his sister lived. We went directly to her house where he introduced me to his brother, nieces, and nephew. She provided us tea and pastries. Although I had come here to see another Extension program, I liked the idea of being invited into a Pakistani home and the opportunity to meet part of Wasim's family. We eventually made it to the Extension office. After talking for nearly two hours, I asked to see some of their demonstration plots. But thwarted again! They said that because it was Thursday, prior to their "day-long weekend", their work day ended early so there wasn't time for a field visit. Apologizing for the miscue Wasim ended up taking me to a friend's farm where, I saw more buffalo!

In the FSR scheme of things, demonstration plots come *after* one or more research recommendations have been developed through on-farm trials. Since this was part of the researcher-extensionist-farmer cycle, I was anxious to learn more about the process.

Before leaving for Faisalabad, I tried once more. Wasim, with some confidence, told me he had heard about an Adaptive Research Center, 6 near Lahore, that actually was implementing an FSR program. Zafar, Shahnawaz's replacement while he was studying abroad came, with us. Arriving at the Center we met the Researcher in Charge, the Director of Extension, a few researchers and an SMS. All said they knew FSR and were actively implementing the approach. After some time I couldn't discern whether we were being told what *ought* to be done or what *was actually being done*. They had the description of the process down pat. Once I had enough, I asked if we could visit some of their on-farm trials. "Of course," the Director said, "It'll take just a few minutes to arrange for a driver." Before long he was back and we drove a mile or so toward the main gate. But before getting there, we came across two farmers standing by the side of the rode. "Here are the farmers," he said. Ask them what you like, he said. To my

surprise, I learned that they were *laborers* living on the station who, as part of their employment, were given a small place to live and a plot of land to cultivate. They hardly qualified as small-scale farmers cultivating their own land.

Giving up on the on-farm trials, I asked the Director if he would show me some of their on-station trials. Given the importance of cotton in the area, I asked if we could visit one of these trials. I was interested in knowing if they were experimenting with

These are research sites in which successes on a central research station are modified to adapt them to agricultural conditions in an area. The Guidelines, instead, used on-farm trials according to *recommendation domains* for the same purpose.

FM150, one of the popular new varieties being tested at Ayub. Such names are kept as they are, rather than being translated into Urdu. When we found the researcher we asked him to show us his cotton variety trials. As we were walking through the knee-high rows of cotton, I asked the name of the variety we were seeing. The Director translated my question to the researcher; and in doing so, I heard him say FM150. Sure enough the answer came back that the variety was FM150. Ah ha, I thought, the Director had told the researcher what to say! As we were returning to his office I asked him if he had done so. He looked at me sheepishly and said, "I didn't know you knew Urdu!" I was being given the run-around; and Zafar was privy to it! When John asked how the trip went I told him of the problems expatriates have trying to gather information on their own. Given the problems of translation, misunderstanding, and down right deception. "We're being thrown to the wolves," I told him.

By now I had given up on seeing anything near Lahore that even approached FSR. So, I was ready to move to Faisalabad where Dr. Nayyar had agreed to work with me. Shortly before we left Rip Van Velsen joined our team. He was a horticulturalist from Australia whose assignment was to find out why citrus yields had been declining. Citrus canker was the suspect. He impressed Vicky and me the moment he stepped in the room: possibly 60, tall, sinewy, and witty. We learned from John that he was known throughout Australia as *the* citrus specialist, that he served on several national boards, and competed in rowing events in the seniors Olympics. Before long he was telling Vicky and me about his assignment here, which he doubted would be difficult. After I left the room to get back to work he showed Vicky a stack of ten reports that John had given him to read, but having no intention of doing so. He'd wait until he got into

the field to figure out what to do, adding that he knows that he is working when "I've got me head down and me arss up." Before Vicky and I left for Faisalabad, we got to know Rip much better. He liked to talk and we liked tp listen to his stories about the "Outback." My problem was that I could understood less than half of what he said because he talked so quickly in his heavy Australian accent. Before long, making a joke of it, I relied on Vicky to "translate" for me what he was saying. Thus bonded, we continued to trade letters long after we had left Pakistan.

Finally, on September 15th, after spending two-thirds of my time in Lahore, Ralph, Neil, Rip, Vicky and I headed for Faisalabad. After checking into the Serena we met Nayyar who accompanied us to a meeting with the DG. The DG told us that the ARP-II project was a mess and that he expected the pending World Bank review to be difficult. When we gave him the reports John had written for him he said he was relieved; they would help. Besides, he believed the true solution to agricultural productivity in the Punjab hinged on solving problems related to soil fertility, salinity buildup, and drainage. Spoken like a true advocate of his own discipline, the soil sciences. So, what hope was there for an interdisciplinary approach like FSR? Talking it over with guys later, we figured he was either forced to accept ARP-II by higher authorities or wanted the funding that came with it. I was beginning to see why FSR had not gotten far at AARI. After leaving this meeting we returned with Nayyar to his office where he expanded on his rôle as Director of Agronomy. By the time our visit was over, I had concluded that he and I could work together, that this was where I should have been from the start, but wondered how much I could still get accomplished.

After several meetings, Nayyar agreed with me that an FSR Coordinator's position ought to be created within his department. He asked me to write him a memo describing the need and qualifications for that person. Meanwhile, I scouted around and found a senior economist working on the Ayub campus who was qualified and interested. I gave Nayyar a memo with that person's name, which he then submitted to the DG It wasn't long before the DG rejected the proposed individual: first, I had suggested that the Coordinator be a Director, and, as Director, he could not serve under Nayyar, second, we should not have suggested someone for the position, since new positions must be open to all qualified candidates, and third, the person we had named was working at the Federal level. How stupid of me. Nayyar either trusted me too much or wasn't paying attention.

Going back to the drawing board, I thought we had the matter worked out.

Nayyar would downgrade the Coordinator's position to one of Section Chief, on a level with the other Chiefs reporting to him, and give Younis, the Department's economist, that position. The problem here was that Younis didn't want the job because it carried too much responsibility. Even in his present job he said he couldn't keep up with all of the reading he needed to do just to keep current professionally what with having to care for his large family and *praying five times a day*. Strange, I thought, hearing that from a devout Muslim. Eventually, Younis accepted the position.

Equally discouraging was what I found being done in the name of FSR. At my request Nayyar arranged for me to visit one of the Department's on-farm trials. It took two hours just to get there! Why so far away, I wondered? My mouth dropped open

when I met the farmer. Not only did he say he farmed 120 has, but he spoke fluent English that he learned while studying abroad! His on-farm trial was a comparison of transplanted rice vs broadcasted rice. This was not an on-farm trial as I had come to know them, but a trial used by the researchers to learn how technologies perform off-the-station.

Giving up on Nayyar, at least for the time being, I turned to writing my final report. Feeling time running out I ate my meals in our hotel room. Other times, after having completed a section and I was able to relax, Vicky and I would invite Rip and Neil for a drink in our room before going downstairs for dinner. Both liked Murree, the Pakistani beer brewed in Rawalpindi. Yes, in a dry country like Pakistan. Sometimes one of them would invite us to his room. When we were alone for dinner Vicky and I would sometimes have a martini beforehand, but not too often because, I still had a lot of writing to do.

Besides the occasional tiddly at dinner time life in Faisalabad had its advantages.

Because Nayyar didn't expect to see me every day I could go to the large public park next to the Serena. It had several miles of pathways, a botanical garden, and a museum. Our first Friday there, Vicky and I had walked through the entrance, past areas crowded with families, young men in small groups, and children on swings. As we approached a kiosk in the center of the park, a young man approached us. In good English he asked if we would stand inside the kiosk so that he could take a picture of us. As we were about to enter, we sensed we were dealing with a smart aleck. So, I said, "Thanks, but

no thanks." and moved on. We obviously stood out as foreigners, possibly the only ones in the park. With that we ended our stroll and returned to the hotel.

Often, I would rise early so that I could jog in the cool of the day. Even at this hour many would already be there, walking, jogging, or doing calisthenics; or, small groups of elderly men dressed in long, white robes would be in serious debate. They caused me to think of the philosophers debating in the Acropolis. At times my presence in the park would draw the attention of a few young men with whom I would talk. Most looked to be young professionals. Once I told one of them about my work at Ayub and he told me of his work as an Extension Officer. Another time a couple of lawyers wanted to know what I thought about protecting the environment. Another time a small group gathered around me to talk about US-Pakistani relations. One even came to the Serena wanting to continue our discussion. I was impressed by his curiosity and interest, but didn't have time for that once I had begun writing my report. During several days in October the military restricted entry to the park as a precautionary measure during the national elections. This was the time Benazir Bhutto won the race for Prime Minister.

Anticipating disturbances was not unfounded. Several times during our stay in Lahore the National Front would call a strike and we would be advised not to go to the office, or if we did not to follow our regular route. Mostly these shutdowns were short and not violent. Still, at times we would hear about a mosque bombing in our neighborhood that killed 20 or so. Even though serious, we paid little attention to them figuring they were between competing religious groups. Little did we know then that these were a forerunner of things to come. I learned about one of the bombings from an

elderly Pakistani I met while walking around our neighborhood. In excellent English he assured me that we were not in danger. He even invited me to his home for tea so that we could continue our discussions. Now, back to Faisalabad.

The Serena was nicely air conditioned, so the heat that sometimes reached 120° wasn't a bother. It also had an oversized bathtub, called a swimming pool, within a walled off area. We would both go there occasionally. Sometimes while I was working Vicky would go there by herself. After the word got out Vicky would spot peeping eyes through the cracks in the brick wall, which put an end to that. Pakistanis were not used to seeing "uncovered" women.

There were other reminders that we were living in a Muslim society. One evening after dinner Vicky and I were strolling down one of the streets bordering the Serena when an elderly fellow in traditional dress pointed his finger at us and yelled something in Urdu. Apparently, he didn't like Vicky being uncovered, even though I was with her. At other times Vicky would take our laundry to the cleaners just beyond the hotel's gate where sometimes young men would be sitting outside the entrance. In time they became assertive wanting to know about women in the States. "Is it true that they can go wherever they wish? Could they kiss in public." Even, "Did they not wear bras?" Once I accompany her just to get a good look at these guys. But all in Faisalabad were not like that. Sometimes when Kate was with John she and Vicky would go to lunch with Kate's Pakistani friend who lived here. The friend refused to cover her head saying, "Some of the old men here are just a bunch of old fogies. I refuse to pay them any attention."

On Oct 21st Vicky and I return to Lahore so that I could finish by end-of-tour report. I compared what I had seen with what ought to be done in the name of FSR then proposed ways for improving research-extension-farmer linkages. What was the value of this report, other than fulfilling my contractual obligations? None that I could see.

Vicky and I ate nearly all of our meals at 11 C/B. Because Kate didn't like to cook they had acquired a Pakistani for that. The young, pleasant fellow's name was Bha (brother). When we would enter the kitchen, he typically handed us a plate from the cupboard and said in a low, flat drawn-out voice, **p l a t e**. John's breakfast was a simple matter of coffee, juice, and Weetabix-a god awful cereal much like Shredded Wheat but with far less taste. John would have loved bacon, eggs, and toast, but Kate kept him on a strict diet to keep his weight down. Occasionally, Vicky would poach him an egg. Sometimes she would cook dinner for all of us. Her curried mutton went over big, except for Ralph, the vegetarian. So, for him, she prepared a large bowl of lentils that Ralph nearly finished in one sitting. On special occasions like these we would sit together in the living room for a gin and tonic with Kate providing the gin. A time or two we went to the Hilton for dinner. Once, Vicky and Kate went to the Intercontinental, where we had once stayed, to swim and have lunch. Our other source of diversion was the American Club where we might go on a Thursday evening for drinks, snacks, and talk. There, the Aussies introduced me to Foster's beer, which I liked. So, while Vicky more than once said our long stay was boring, there were times when she did enjoy herself.

Another outing for Vicky and me was the surprising and pleasant dinner invitation by Wasim. His home was close by, modest yet nicely furnished. His wife, Fatima, was pretty and about Wasim's age. And un-veiled. With the help of a young maid she fixed the meal then sat down to eat with us. Quite unlike my time in Karachi when my Pakistani contact there invited me to his home for dinner in which the two of us ate alone after his wife had served us. During the meal Wasim talked about continuing his study of the sunflower at the Univ in Faisalabad. He even talked about going to graduate school. Fatima joined in the discussion supporting Wasim's plans for the future.

As usual, Vicky had taken care of our travel plans. On October 28th we flew to Karachi, off to Dubai on Emerates Airlines, then a four-hour flight to Malé, the capitol of the Maldives. Getting off the plane we experienced the warm, humid air one expects near the equator, vacationers swarming around us. They were mostly young, well tanned, and packing scuba and snorkeling gear. A launch took us for a long ride before we landed at the Club Med dock. An attractive hostess greeted us then prepared something for us to eat since we had missed the dinner hour. While eating we watched a stage show already in progress. To close out the show we got up along with those around us and sang Y M C A, the hit song of the disco group, Village People. As they sang, they formed the four letters. Vicky got it right off, but it took me awhile before I could get just the first letter right.

The next morning in the light of day we got a good look at where we were staying. Our separate bungalow sat on ten-foot concrete pillars amid other buildings of

the same design. Coconut palms swaying in the breeze. The central dining and meeting rooms were just a short walk away. After breakfast we asked about scuba diving. This would be the first time for both of us, so we asked about instructions. We began by meeting the resident doctor. That he was French did not surprise us since Club Med is a French corporation. After a brief physical he asked about our health. I lied by saying I felt fine, even though I had a minor head cold at the time. He concluded our short session by confirming that we were in good health, then said, "No one over 55 should be diving, but that was up to us." And here I was, about to turn 67. We next met with our diving instructor who described the equipment and how to use it. A swimming test came next. We rode in a launch with Hans, our Swedish guide several hundred yards beyond the pier. There the boat captain cut the engine and Hans told us to jump over the side. He wanted to see how comfortable we were in the water. I performed well enough. But when he watched Vicky swim, he beamed saying that she was the best swimmer he had ever tested! He joined us at dinner that night. We heard that it was the custom for instructors to dine with the ones they had tested that day. Or, it might have been because of Vicky's swimming ability; or, he might have wanted to learn more about our international life because we did talk about that, or maybe our age set us apart from the general crowd. Whatever it was, we liked the attention.

From then on our instructors and guides were women. Two of them worked with a group of us for the next two days. We began by going into shallow water. Vicky and I both found it somewhat frightening and uncomfortable at first when we had to first remove then put back in place our breathing device, called a regulator, then do the same with our mask. Because we were in shallow water we could stand up should

we panic, which neither of us did. Next, we practiced controlling our horizontal position by exhaling to lower ourselves and inhaling to raise ourselves. The instructors told us to relax and breathe shallowly so as to conserve the air in our tanks. By the end of the second day I was ready for my first dive, but Vicky wasn't. She would stick to snorkeling. Being under water and depending on her regulator gave her claustrophobia.

The next four days were pure delight. My days were limited to a single dive each morning. We could have taken two. But being beginners, our guides thought it better not to. Once the group I was with fitted ourselves into our vests, strapped lead weights around our waste, adjusted the heavy tank on our backs, and inflated our vests we were ready to go. One by one we crossed our arms over our chest and jumped overboard. Once in the water we were told to exhaled slowly for the first fifteen feet. This was the part where we were most likely for our ears to hurt. If that happened we should pinch our nose and blow hard thereby equalizing the pressure, repeating for the next few feet in necessary. From that point on we should be okay. Then we would continued to exhale till we reached the sea bottom around 40' below. At that point if we were okay, we would give that signal; if not, we were told to point to the problem whatever that might be. Then, we would get into single file and follow our guide with our arms across our chest and gently move our flippers up and down. Sometimes we would swim along the seabed observing the coral and scores of tropical fish. Other times, our guide would take us to a rock ledge that dropped off hundreds feet into the dark blue. As we swam, our guide would point in one direction or another to signal things for us to see, such as a hermit crab, a lobster, eels hiding among the rocks, even a shark that was 100' feet below us. I felt some concern over the shark but it made no

move to approach us. Our guide took it in stride. Because we were beginners our dives seldom went below 75'.

Of all my recollections, I found the most delight occurred when gradually rising to the surface. We needed to ascend slowly so that our bodies could adjust to the decreased pressure. Otherwise we might experience the "bends." Stopping several times on the way up, with the bubbles from our expended air drifting upward, I would see the bright sun dancing off the surface. I found this exhilarating because of its beauty, uniqueness, and knowing that I had finished a successful dive. I grew more confident with each dive. I even longed to go on one of the night dives, but I had too few of them to qualify.

For my last dive Hans had lined me up to go with Stephanie, one of the more experienced guides. He said she would take a few of us to a spot where she knew large moray eels hid. After reaching their hiding place, Stephanie tapped on the rock and soon two huge eels stuck out their heads. Once the larger of the two was out far enough she patted the top of its head. Thus encourage, the two came all of the way out of their "den" revealing their large heads, long snouts with rows of sharp teeth, and all eight feet of their patterned bodies. Stephanie said that these old fellows were accustomed to her visits. It was with the younger and smaller ones that she had to be careful.

I did not dive the last day because I needed to "detoxify" 24 hours before our flight. That gave me a chance to snorkel with Vicky–something I should have done in any case. We entered the water on the far side of our small island and as we floated could see interesting coral formations and a variety of small, colorful fish. Special were

the scores of tiny effervescent blue ones that darted around us. So absorbed I hadn't realized that I had drifted into shallow water over sharp coral formations. With little space to turn around I peddled back into deeper water where I was okay.

Each evening immediately following our meal we had some form of entertainment. Besides the variety show on our first night there was dancing to the music of a combo with its vocalist, quizzes led by a masters of ceremonies, and a stand-up comedian. As usual each night of entertainment closed with the customary singing of Y M C A. By now I had learned how to form the letters. Our last night there, Stephanie, two other female guides, and a bartender from Mauritius sat with Vicky and me. We had the table all to ourselves making us feel as though we were part of their organization. We told them how much we had liked our stay and promised to vacation at another Club

Med if our travels did not bring us back here. Or, if global warming had not flooded these beautiful islands, since their highest point was only eight feet above sea level!

The trip home was not for the feeble. It began in the middle of the night with a long boat ride in a rough sea to Malé, then our plane, which was delayed, didn't take off till 2:00 a.m. We landed in Singapore at 9:00 a.m. Vicky had arranged for the airlines to provide us with a layover at the Meliá, part of an international chain of good hotels. On the way to the hotel we marveled at the greenness surrounding us, the warmth from a hazy sky, the open spaces and the small lakes bordering the modern freeway on which we were traveling. While Vicky was getting her hair done, I walked about a mile to a shopping center. What a crowd! Yet quiet and orderly. People were sitting at tables

placed in an open area eating, drinking, or just conversing. The place looked like a resort.

Early the next morning we flew to Tokyo and then took a nine-hour flight to Los Angeles. At the time Mike was working at the La Quinta Country Club and had booked us without charge into the adjoining La Quinta Resort & Club. Looking at the tariff sheet posted inside next to the door I noted that the regular fee was \$350 per night! Far more than we would spend, except on very special occasions. Our six days there allowed us to spend precious time with Mike and Jackie once again. We returned to Ft Collins on November 13th, met with Dad who seemed to be okay, then settled into our regular routine.

Part - II

Vicky and I arrived back in Pakistan on June 13 of the following year. On this trip our stopover was Frankfurt, where we overnighted at the Sheraton. Just as in Bangkok, we used the overpass to go directly to the hotel lobby. That evening we went downstairs to the same pub we had visited before and ordered the same excellent German beer and brats. We had an afternoon flight the next day that put us into Karachi at 2:00 a.m.. That gave us four hours to kill before our flight to Lahore. Once there, John and Kate put us up at 11 C/B as before.

The very next morning Rafique drove Vicky and me to Faisalabad. No lounging around in Lahore this time trying to figure out what my assignment should be. Shortly after we had checked into the Serena, three other OPCV consultants, Peter Reid, Ben

Robinson, and Angus Wilson, came to the hotel to meet me. Ben was carrying on after Rip, Angus was a specialist in Integrated Pest Management, and Peter was a Diagnostic Survey specialist. I had met Peter before, but not the other two.

Peter was from the UK, young and self-confident. When we had met before he had proposed diagnostic surveys in Khanawal District for the cotton-wheat system, and in Shaikapurah District for the rice-wheat system. John hadn't informed me about Peter, so I hadn't known what he hoped to accomplish. At that time, our schedule for planning, training, and conducting surveys along with their analyses and reporting indicated that we would be working together for some time. It looked like a *fait accompli*, having been worked out entirely by Peter. After the first two days Peter left and I had put the matter out of my mind. Now, Peter was back picking up from where he had left off before.

As we began our discussions Peter said he knew about the Guidelines, was glad to meet me, and looked forward to our working together on these diagnostic surveys. But yesterday's cordial meeting soon evaporated. He surprised me when he bluntly said that the Guidelines were outdated since FSR had moved on since then, and that my final report of last year was dull and uninspiring. Now, he said, the approach to FSR was to rely on formal surveys of small-farmer groups. I knew that the Guidelines had focused on individual farmers, because that was what Hildebrand, Zandstra, Norman, and the others had been doing. The Guidelines had relied on the creative work of these top-notch researchers who had spent years in the field developing and testing their

approach. To suggest, as Peter did, that a new approach to FSR based on the largely untested ideas of a few writers, ⁷ didn't make sense to me.

And formal surveys? Did Peter know that the diagnostic surveys, which Clyma and his group made popular here, involved multi-disciplinary teams gathering data *informally* about farmers' conditions and problems then testing solutions on research stations and in farmers' fields; and that Hildebrand's *sondeos* were informal and interdisciplinary. The surveys Peter had suggested to Nayyar last year involved the single discipline of agronomy. I wondered if Peter realized the complexity of formal surveys; and the time and cost involved? Rather than argue my case, I kept these thought to myself. Peter, however, sensing my reservations said that he had spent the past six months conducting such surveys in the Sindh where all were satisfied with his results. By now, I figured we had talked enough, so I asked him to lend me these two reports so that I could read them that evening. I wasn't impressed.

For example, Chambers, Robert, et al. 1989. Farmer First: Farmer Innovation and Agricultural Research. Intermediate Technology Pub., London. and Axinn, George H. 1978. New Strategies for Rural Development. Michigan State Univ., East Lansing, Mich.

When we met the next day, I asked Peter how he selected the farmers to be interviewed, how he established the sample frame⁸ and the questionnaire, what statistical methods he used in the analyses, and so on. He had difficulty in answering these questions, saying he left that to others. Before long I concluded that he didn't know what he was talking about and needn't take him seriously. Still, I accepted his suggestion that I modify what I had written on FSR by taking into account how Punjabi institutions functioned regarding FSR. I even promised to write what I knew about questionnaire design and formal surveys in case they could be used for some purpose, other than Peter's diagnostic surveys. In this way we patched up our differences, even began sharing a drink at the end of the day.⁹

With my problems with Peter on the mend, I turned my attention to Nayyar.

During our first meeting after my return I sensed a change in attitude when he asked me, "What did PARB ask me to do!" I found this remark strange, as though he had

A ample frame is a statistical listing of all farmers in an area from which a random sample is selected and to whom a formal questionnaire will be administered. Books have been written on the subject, including that by Casley, Dennis J. and Krishna Kumar. 1988. The Collection, Analysis, and Use of Monitoring and Evaluation Data. Johns Hopkins Univ. Press, Baltimore. Peter knew of this book, but apparently didn't understand its implications.

Yes, it was possible to obtain beer and liquor at our hotel. To do so, we had to claim that we were non-Muslim foreigners. With that, we were given a weekly allotment that we could claim from a storage area in the basement.

neither planned nor knew what to do with me upon my return. That's when I found that his interest in FSR had waned. And the DG had *never* showed more than passing interest in this regard. Strange, because since I had returned I learned that Nayyar was the principal investigator for the Research-Extension-Linkages component of which I was ARP-II's consulting specialist. That made me wonder if John knew this during my first trip here; and, if so, why he hadn't sent me here right off, rather than have me flounder for weeks deciding on my plan of work.

Now, John was off on his crusade for increasing wheat yields and the DG was hoping to take over the Adaptive Research Centers. The DG's reasoning for the take-over was that the Centers were not implementing Ayub's research findings as he felt they should be. If he had authority over the Centers, he could *force* Extension to pass these successes on to the farmers. Nayyar wanted me to help him justify the takeover. Accordingly, I wrote a memo to that effect. In the end, this power grab didn't work out because Planning and Development, which had the final word, rejected the idea.

Nayyar also had other interests on his mind that were more in line with his responsibilities as Director of Agronomy. For instance, he asked for my advise on forage variety trials according to eco-zones, seed quality control, implementing and coordinating the IPM program, and how research and extension coordinated their efforts in the USA. These requests had nothing to do with FSR which was my reason for coming to Pakistan. Besides, they were beyond my area of expertise. After a month in Faisalabad I realized that I was wasting my time here. Nayyar had given up on FSR, if

he had ever bought into the idea in the first place, and Peter was off doing his surveys. It was time for me to return to Lahore and wrap up my assignment. After our harrowing trip back to Lahore Vicky had said to me, "We don't need this!" And I agreed.

I spent the last two weeks of my assignment putting on "workshops" and writing reports. The so-called workshops, as John had labeled them, were simply half-hour lectures followed by 90 minutes of Q&A. Typical classroom stuff. My topics were a critique of reports by Reid and Sturgess, conducting formal surveys, and priority research for the Punjabi Research Master Plan. The fifteen or so junior-level PARB staff attending had nothing to prepare beforehand. Just show up. Except for a glitch here or there I thought the seminars came off reasonably well. Even so, I might as well have been lecturing to "thin air," because as far as I knew nothing came of them.

Besides a short end-of-tour report, I wrote papers on A Revised Approach for FSR in the Punjab, An Approach to the Design of Small, Formal Surveys for ARP-II's Research-Extension-Linkages Component, and An Agricultural Research Strategy for the Master Plan: the role PARB can play. Peter had suggested the topic for the first paper, which, after completing the paper, I thought made sense. I wrote the second paper with some misgivings because I *had never actually participated in even one formal survey*. And I was even less qualified in providing research suggestions for the Master Plan, that John had asked me to do. Based on my interviewing and reading notes I ended up commenting on some of the major crops in Pakistan, livestock, fodder, a plant disease, mercurial powders in stored wheat, and farmer motivation. What a stretch and departure from the reason I had come here!

By now, I had had enough and told John I would not be returning. Even so, right up to the very end, John kept asking what I proposed doing for my next assignment. It was as though he never heard me. I never did meet the World Bank rep who had the responsibility for overseeing ARP-II. By the time we left, I was convinced that this was an ill-conceived project. The DG of AARI was offended that some outsider would be telling him what sort of research program he should implement, the funds he received in the process notwithstanding. This was the first and only time I felt embarrassed by my association with the World Bank.

That done, Vicky and I departed Lahore on July 27th. Overnighting in Karachi we checked into the Beach Luxury Hotel in the southwest part of the city. It was neither beach nor luxury, but nice enough, and a bargain at \$39 a night. That afternoon we swam in the pool swarming with youngsters and dined at a candle-lit, outdoor patio. After reading the menu, we ordered a bottle of white wine and lobster. "Sorry," the waiter said, "We're out of lobster. So, we ordered butterfly shrimp instead, which was excellent. Thus, we celebrated the ending of this interesting but frustrating assignment. Up at 4:45 the next morning we were relieved to find the taxi driver we had ordered the night before waiting to drive us to the airport. It was good to be going home.

Chapter 20: A Jungle Walk

Jan 3rd 1994. Well, it finally happened. I got the call from the Nursing Home at 3:00 a.m. that Dad had died in his sleep, peacefully. His heart had been failing him, which had caused him to fall out of bed and injure his hip—the reason he was in the Nursing Home. We had arranged for him to go there for a few days until he could recover enough to return to his downtown apartment. When Vicky and I saw him the day before, he was so confident of his recovery that he wanted me to be sure to pay his monthly rent. He had an open-casket funeral at the Presbyterian church, as he wanted. Most of those attending the funeral were either Kiwanians or from the church. About fifty attended. Also responding to his wishes we had his cremains sent to Winfield, Iowa for a memorial service. We think that he remembered my mother's funeral there where so many family and friends had attended. But that was eighteen years ago and most of those who knew him had died. Only my cousin Gloria and her husband Bob were there besides Vicky and I. Sad!

Two and a half months after our return from Pakistan Vicky and I were overseas again. I had accepted an assignment with Computer Assisted Development, Inc. as an M&E specialist in Nepal. CADI was the small consulting firm established by Tom Sheng. The Nepalese Irrigation Management Division was in the process of *turning over* responsibilities for managing and operating several irrigation systems in the Terai¹ The idea of the *turnover* was that greater farmer involvement, through their Water Users' Associations, would lead to both greater efficiency and lesser government expenditures. USAID was funding this project; and, because of its current policy, required that M&E be set in motion. I was to recommend procedures for doing so.

¹ The Terai is the lowland area along of the Nepalese-Indian border.

We booked into the Soaltee Oberoi on October 23rd. I was excited when I heard where we were to stay because of my remembrance of the elegance of the Oberoi in Sri Lanka. The place turned out to be nice. but held no comparison with the other Oberoi. It didn't matter, however, because our time there would be short and, during much of that time, I would be grinding away at my laptop. The length of my contract assumed I would need ten days in Kathmandu, a week in the Terai, and 18 days to finalize my report, conduct a seminar and give a debriefing. This was to be another one of those high-pressure assignments in which I would have to complete everything before departing. But fortunately Dave Molden was CADI's resident irrigation adviser in Kathmandu and Madhab Banskota was to be my counterpart. Vicky and I both knew Dave and Karen. Dave had taken my projects planning course *twice(!)* once as an audit because he feared he knew too little about economics, and then for credit. He needn't have been so cautious. And the two of them "baby-sat" our house during one of my overseas assignments.² Madhab was a young irrigation engineer who recently had earned an MS degree from the Asian Institute of Technology in Thailand. He proved to be competent, willing, and pleasant.

I was excited about this assignment because it gave me a chance to reconnect with M&E. Since the Pakistan assignment concerning M&E I had expanded my knowledge about the subject. Even so, I felt like a light weight because I had never designed or implemented an M&E program. However, my fears were misplaced for I soon learned that I was better equipped than those around me. I felt like the one-eyed among the blind. I could turn to Dave and Madhab when I needed help on irrigation engineering. And, on the farming side, I could hold my own because of the FSR project and my time in Swaziland.

During the first week, I met several times with Dave in which he told me about the project's background, it's objectives and progress, and those most involved. Right off, he introduced me to Madhab, then left so that the two of us could get acquainted. Later, Dave

² Eventually, Dave joined the International Water Management Institute in Sri Lanka, one of CIGAR's 15 research centers. Later, I learned that in 2009 Dave had won the prestigious CGIAR award as its outstanding research scientist.

introduced me to the DG of the Department of Irrigation followed by Rajbhandari, Chief of the Systems Management Division, to whom Madhab reports, which turned out to be simply a courtesy call. But the disinterest of the Chief surprised me because the turnover was his responsibility. I thought perhaps he was more interested in *implementation* than *evaluation*.. We gave summary hellos to two guys from Research and Training, and talked with two Nepalese consultants to the Division. We finished off the day by talking with Harry Franks, an ADB consultant from the UK. By now, my head was swimming with all these names, organizations, responsibilities, and points of view concerning my assignment.

Towards the end of the week, I got down to specifics. I spent the better part of a day with Madhab, who explained to me the types of irrigation and crop-production measurements the Division make in tracking system performance. Then, Dave introduced me to V. S. Mishri, System Manager for the West Gandak Canal--one of the two systems that we were to visit the following week. Mishri described the irrigation system: how a barrage diverts water from the Rapti River to the main canal and thence through a system of branches, minors, and blocks to eventually reach the farmers' fields. He said he had been responsible for setting up the Water User Associations, which in turn selected chairmen, financial officers, and record keepers. He informed me about the predominant crops, which were rice in the summer, wheat in the winter, and sugar cane as a multi-seasonal crop, seasonal labor shortages during transplanting and harvesting, crop cuttings based for estimating yields, and staff shortages needed to help in the turnover program.

That out of the way, Dave planned a three-day trip to the Terai for us. He wanted me see the West Gandak and the Khageri irrigation schemes. Accordingly Dave, Madhab, Vicky, and I left just a week after our arrival. Prior to our departure Dave had checked with AID's Health Unit about receiving inoculations against Japanese encephalitis which was prevalent there. The advice the nurse gave him was that we would be in little danger because our trip would be so short. And, "Just try to keep away from farming areas where flies, the host for the disease, would be most prevalent."

Having only recently come from Pakistan where overland trips had been so harrowing, I was dreading the several hours it would take to get us to the lowlands. I needn't have worried. The roads we traveled were in good shape, the traffic was light, and our driver did not hurry. We stopped along the way to visit historical sights, enjoy scenic lookouts, and stopped for tea. When Vicky turned down the tea we received (typically loaded with sugar), Madhab asked if she were diabetic. She said, "No, I just don't like sweet tea ." Please bring me a Fanta instead." Entering the lowland we found a broad, flat, fertile agricultural area whose principal source of water was from an extensive irrigation network. I was to learn that tube wells, springs, and rainfall augment water from the canal. Most of the farm houses and buildings revealed a modest level of prosperity despite, as Madhab told me many farmers have only two ha to irrigate.

We had arrived at Bharatpur, a town of about 80,000, where we ordered fried fish and rice at a roadside restaurant. Vicky and I were surprised to see Madhab eating the rice with his fingers by rolling the sticky stuff into a small ball and popping it into his mouth. Then we figured this is the way they do it in Nepal. There was probably a place off to one side in the restaurant where he could wash his hand before and after eating, as in Ethiopia. After we had eaten we made the short drive to the Hotel Chitwan Keyman in a pleasant area on the edge of town. We check in, rested a few minutes, then Dave and Madhab searched out the Manager of the Khageri Irrigation Scheme.³ For an hour we listened to the Manager describe what was going on in the district and how the turnover program was progressing. Then he drove us to a nearby village to meet the chairman of the Main Canal's WUA, which must have been one of the top position within the Association. Judging from the farm house and the feedlot nearby we concluded that this was one rich farmer that probably accounted for his being chosen chairman. He welcomed us warmly, ordered tea, then proceeded to describe his role as chairman, how the WUA functioned, some of its problems, and his hope that the Systems Management Division in Kathmandu would continue to assist them technically and financially.

³ Schemes such as this one were carefully laid out systems of a main with branches, tertiaries, minors, block canals, and ditches for delivering water to farmers and conveying drainage water away.

Within seconds of our arrival, flies were swarming around us. So much for the Health Unit's advice to stay away from farm yards, especially those with livestock. What did the nurse think we would be doing during our trip? Back to his office, the Manager laid out our program for the next two days.

We returned to Khageri the next day where we met three farmers who listed their concerns about the turnover. They wondered if the Division would still pay them for cleaning their canals because they valued this as supplemental income. They also said that they objected to having to share water with new settlers who recently had come from "the hill." Interesting, we thought, since they probably had come from these same hills some years earlier. They told us that they knew of families at the tail end of the system whose water deliveries were inadequate, uncertain, or untimely. Sometimes they received no water at all. Finally, they faulted some WUAs because their chairmen, who are often rich, look after their own needs and those of their friends rather than the other members. Having gotten good insight about farming conditions, we returned to the office of the Manager of the Khageri scheme where he showed us his records of Association members, the size of their holdings, their water use, paid membership fees, crops grown, and market prices.

After lunch we drove for a couple of hours to meet the Chairman of the West Gandak project. With him were two WUA officers, one who was the secretary for the main canal and the other who was the secretary for one of the distributaries. For an hour we listened to what they had to say about their activities, hopes, and concerns. By now, we were receiving what we thought was honest information and opinions, not the "party line," as I had experienced in Pakistan.

The following day we drove along the Main Canal. At one point we stopped to observe a work crew cleaning the bottom of an irrigation channel. Men at the bottom were hand-loading buckets of silt for young, slender women who carried these on the top of their heads up a narrow pathway along the sloping side of the canal to the top where others would remove the buckets and place its contents off to one side. Next, we drove along the wide river separating Nepal from India to an impressive barrage a quarter of a mile long that is used to

control and divert water into the irrigation system. Then, we took a narrow road to the far end of one of the systems so that we might meet a Chairman who had agreed to meet us in his "downtown pad." Guided by a member of the Association we walked along a dusty path with small, mud-packed straw huts on either side. Finally, our guide stopped and motioned to one of the huts no different from the rest. A man in traditional dress, who turned out to be the Chairman, was standing in an unframed opening motioning for us to enter. We had to stoop to get inside and once our eyes adjusted to the darkness, we could see that the room was perhaps four meters across with a mud-packed floor. Seated in a semicircle on low stools were six men who Madhab whispered to us were members of his Association. Flies swirled around us. Comparing the rustic conditions of this Chairman's "office" with the elaborate farm house of the first Chairman we had visited accentuated the vast gulf between the WUAs for the main canal and those of at least this minor distributary. Before we could begin our questioning we had to wait for the customary serving of tea. Vicky and I looked at each other wondering about the source of the water and how long it had been boiled. But, we shrugged it off recognizing that this could be the price one pays when doing this type of work. Relying on Madhab to do the translating we asked our questions and received more or less confirming responses to what we had already heard. After an hour, we thanked the Chairman for bringing this group together and departed.

That evening over dinner Dave, Madhab, and I talked about what we had learned during the past three days. The two of them probably knew much of this already, but felt it was important for me to hear it first hand. Following is what we came up with: 1) the Government needs to prepare these systems for the upcoming change in ownership, that is, the systems need to be brought up to design standards especially in sandy areas where sections of the canal have caved in; some of the channels have substantial amounts of silt that must be removed possibly requiring heavy equipment and contract labor; and control devises ought to be inspected to see if they are functioning properly, and if not, repaired or replaced; 2) it's important to realize that some of the farmers feel they have little or no ownership in the irrigation system because it has always belonged to the Government; 3) some members fear that, even though their systems may be ready for turnover, the Associations will not be able to collect enough funds from their members even for routine canal cleaning, nor do they have the requisite technical knowledge for doing so; 4) some members fear that once elected, their chairmen will have little day-to-day

interest in their needs since they do not farm themselves but instead leave their lands in the hands of managers, or they sharecrop; 5) increased demands by the WUA could jeopardize their ability to earn off-farm income that helps them pay for purchased inputs and day-laborers needed during transplanting rice and harvesting; 6) some of those at the tail end of the systems hoped that the *turnover* would highlight their water-delivery problems; and 7) we concluded that West Gandak was in much better shape than Khageri.

The next day our 8:00 a.m. flight got us "back up the hill" in 20 minutes! Vicky and I relaxed at pool-side, swam briefly, in the frigid water that explains why we saw so few bathers, had lunch, and, later, I read a small book on irrigation by Chambers and Carruthers and a report on irrigation in Nepal by Doug Smith–both relevant for my assignment.⁴ By that evening, Vicky's appetite had left her. So the concern we silently conveyed to each other in the Chairman's hut might have been valid.

During the next few days, I made the effort to see the rest of those Dave had suggested. They included those in Kathmandu from institutions recognized for their irrigation expertise, especially for the Indian Sub-continent. These included two members of IIMI, a member of the National Irrigation Association of the Philippines, and Tetsuro and Anna Liisa from ADB. Tetsuro was the resident team leader and Anna Liisa was their M&E specialist. When I was finished with his group I discovered that none knew much if anything about the subject, even Anna Liisa. After finishing with this group, Dave introduced me to M. M. Shestra, the Deputy Director General for the Irrigation Management Division whom he said wanted to meet me. Shestra began by describing the West Gandak and Khageri systems, the turn over, and finished by saying he hoped my report would contain suggestions as to what measurements needed to be made for water deliveries, as well as the agronomic data to be collected. Because I knew

⁴ Chambers, Robert and Ian Carruthers. 1986. Rapid appraisal to improve canal irrigation performance: experience and options. Research Paper No. 3, IIMI, Sri Lanka; and Smith, Douglass. 1987. Irrigation management project: monitoring, evaluation, and impact assessment. Ministry of Agriculture and Winrock International, Kathmandu.

precious little about actual measurements of water deliveries I turned this responsibility over to Madhab. As for collecting data on agriculture and farm family welfare, I knew what to say.

By now I began to feel that my time was running out. So I began writing in earnest. I completed a revised draft in eight days. Occasionally during the many hours cooped up in our comfortable hotel room I would gaze out the large window to the swimming pool at the far end of a grassed area. Out the other window I followed the daily feeding of a tethered sheep. Then one day I observed a fellow with a long knife slit the sheep's throat and left it to die. I suspected this had been a sacrifice for some religious holiday, but unlikely a Buddhist one. Because I had been living mostly a Spartan life Dave persuaded me to take a break. So, Vicky and I went with him and Karen to the American Club late one afternoon. There we chanced to meet Bob Mohammed, who was one of "the gang" from CSU who had worked with Clyma. He had married and was now working within his profession here in Kathmandu. This was just another example of the vast reach of CSU's international water management expertise.

Following is the essence of my report. I began with a diagram that depicted the degree of M&E's complexity beginning with recordings of inputs and outputs and ending with estimates of effects and impacts. The easier part was measuring *inputs* of labor, material, and equipment and expenditures of local and foreign currencies and *outputs*, such as numbers of persons trained and kilometers of canals repaired; the difficult part was estimating *effects*, such as more equity in water deliveries, and *impacts*, such as increased family welfare. By now I had concluded that the Division was routinely recording *inputs* and *outputs*, but was not even thinking about *effects* and *impacts*. Consequently, I needed to address the latter by proposing an approach that was flexible in gathering data and simple in doing the analyses.

With the above as background I turned to a strategy for the Division's M&E program that 1) would compare West Gandak as a representative of a turnover program that is successful and Khageri as one that has problems, 2) select a system, yet to be determined, to serve as a control, 3) for these systems, select a distributary that is working well and one that is not, 4) randomly select farmers at the *head* and the *tail* of various components of the system, e.g., the branches and tertiaries, 5) periodically collect data on the area irrigated, crops, yields, agricultural inputs, 6) build in *checks* as a means of validating the data collected, 7) measure

irrigation and production efficiencies using statistical t-tests and correlations, and 8) create an evaluation team to review the findings and conduct followup studies. Team members might include an irrigation engineer, agronomist, economist, and rural sociologist. The idea of contrasting effective and ineffective systems, productive and non productive areas, and so on was to accentuate the differences in a way that makes them easier to understand and to suggest improvements. The rest of the report elaborated on these suggestions and included examples in the text and the appendices. I included Madhab as a co-author because of his help with the details of irrigation and knowledge of the West Gandak and Khageri systems.

After accepting my draft Dave thought we should return to the Terai to find out what the Division's field Manager, WUA officials, and farmers thought of our ideas, including the data that needed to be collected. Accordingly, Dave, Madhab, Vicky, and I returned to the Terai where we checked into the Chitwan Keyman hotel and contacted the Manager of the Khageri scheme as we had before. For the better part of three days we returned to the two irrigation schemes so that we might question those who would be most affected by the approach we were proposing. Generally, the Manager, Chairmen, and members of the WUAs agreed with our ideas, including data collection. One difference during this trip was that we encountered several women farmers who told us about their role within the family and their thoughts about the *turnover* and the M&E program. We learned that, besides their usual responsibilities to the family, they also engaged in some farming tasks and WUA decisions. Another difference was that this time Dave and Madhab would return to Kathmandu on the fourth day, leaving Vicky and me behind so that we could visit the Royal Chitwan National Park, which was nearby.

After our last meal at the Chitwan Hotel the four of us walked through sliding doors to a patio to have our usual after-dinner coffee. With its secluded setting and the agreeable temperature this was a pleasant way to finish the day. We were rehashing what we had learned during the day when two young, well-tanned men drew our attention. Soon, we were talking. They said they were British and had cycled down to the Terai from Kathmandu so that they might visit the Chitwan park. Yesterday on a jungle walk they had come upon a huge python curled up in the hallow under the roots of a large tree. With a flourish of a limp hand the effeminate one said, "I was so shocked I screamed like a girl." Walking past pythons? That gave Vicky and me something to think about because our program included a jungle walk!

The next morning our alarm got us out of bed at 4:30 for the drive that brought us to the Narayani Game Lodge by 6:00 a.m. The wood-structured lodge still bore the smell of fresh paint. We checked in at the small registration desk where the manager confirmed our reservations and our day's activities, took care of our luggage then directed us to a small dining room. We quickly ate breakfast, freshened up in our room, then walked a short distance to the edge of the cliff overlooking the Rapti River fifty feet below us. We walked down wooden steps leading to the river below until we reached a platform that allowed us to board the carriage on the back of a female elephant. After the driver helped us get settled he took a straddling position behind the elephant's large ears. With his long, hooked pole he goaded the this huge animal to begin. We swayed from side to side during the crossing. Then we went up a rather steep slope and directly into the jungle. This was not a thick jungle that one imagines the Congo to be. Still, a jungle it was with tall, slender trees, interspersed with large trees, and abundant shrubs, and tall grass. It wasn't long before we came upon two grazing rhinos each with an offspring that were directly in our path. We wondered what would happened. Would the mothers charge us? Would we ease around them? What? But without hesitating, the driver jabbed our elephant behind its ear where upon the animal lowered its head and charged. It was no contest. The rhinos scattered and we continued on our way. That was the extent of our excitement. But we did enjoy coming across monkeys in the trees, deer grazing in open areas, and peacocks flying from one tree to another. A special treat was to see one of them leave a high branch to drift down to the ground and proceed to spread it plume. The total trip took about three hours.

After a quick stop at our room, we returned to the water's edge. There, waiting for us was a young man standing next to a long, narrow dugout. He said, we were scheduled to visit the crocodile breeding center a few miles downstream. Using his long pole he guided us there amidst the other dugouts going upstream and downstream. We also saw several groups of people waiting to ride across the river in makeshift ferries. Once at the Center we wandered along paths to view the crocodiles in their various stages of growth. This specie had long narrow snouts, which contrasted markedly with the heavier jawed crocodiles we were accustomed to seeing. Walking over a small footbridge we watched as one of the attendants

feed raw meat to some grown crocodiles. We hadn't thought of looking for crocodiles on our way to the center. But after watching them being fed, noting how quickly and high they leaped to grab the meat, hearing the sharp snap of their jaws, and learning that these would soon be "released" into the wild, a chill came over us as we realized that "the wild" could mean the very river we had used to get here. Then and there we pledged to be more observant on our way back to the lodge.

After lunch and a short siesta, we walked down to the water's edge again. This time to watch the Lodges' elephants getting their afternoon bath and the scrubbing by their attendants. This was evidently a treat, given the contented way these huge animals leaned into the brushes, the way they occasionally sank beneath the surface with only the tips of their trunks showing, and then surfacing to spray their backs with water. Soon, the two guides for our jungle walk introduced themselves. One said he was a Forest Ranger, the other said he was a Sherpa. Both were short, slender, and strong looking. They paddled us directly across the river to the point where we had gone on the elephant ride. I had imagined that our "walk" would take us along the river's edge, with our guides pointing out interesting things for us to see, and possibly stopping at a rest area where some attendant would offer us a cold soft drink, much as we had seen in the Seychelles. How wrong I was! Instead, we headed *directly* into the jungle taking the same route we had taken in the morning. That jolted our comfort zone because instead of being eight feet up on the back of an elephant we were now at ground level. Shortly, the guides stopped, took out their heavy knives of the sort made famous in the Crocodile Dundee movies "Now, that's a knife," found a sturdy limb about two inches thick, cut through it with one swipe of the knife, cut it into two feet lengths, and sharpened both ends. These sticks and knives and their wits would be the only protection our guides could give for whatever might confront us! No heavy barreled rifle, not even a pistol. At this point I recalled some of the literature promoting the Park as being one of only a spots in the world where the Bengal tiger could still be found. We also recalled the two bikers' tale about encountering a python.

But we trudged on trying to ignore these dangers. Eventually we settled into an easy walk making an effort to enjoy this "jungle experience." Along the way we saw many of the same sights we had seen in the morning. Then suddenly, the Sherpa dashed into a shallow gully off to our left shouting and flailing his arms. Out came a full sized rhino running away

from him. Even so, the Sherpa circled the area several times. When he returned to us he said he wanted to make sure other rhinos was not around. Finally, a smile creased his lips, his breathing subsided, and his dilated eyes returned to normal. He explained that he had seen rhino hoof prints leading into the gully and knew that he had to startle the animal thereby confusing it. Had there been trouble we should have climbed the nearest tree. Fat chance we thought, given how narrow the trunks of the trees surrounding us were. The expression of disbelief on Vicky's face said it all. "I'm supposed to climb a tree?" I agreed. I didn't think she could; and I wasn't sure I could either.

I tracked the position of the sun and used my watch to judge the direction and distance we had gone. By the time we headed back I figured we had walked over three miles. The sun was well above the horizon, but setting rapidly as we headed back along a different trail. About half way back, the Sherpa put a finger to his lips signaling us to be quiet and to watch where we stepped. Slowly, he led us to the edge of a clearing and pointed to a rhino some 200 meters away. We had to be careful, he said, because we were up-wind. Later, he explained that animals of the Park are used to their smell, but not to those of visitors. When all was clear, I asked why he was concerned this time when we had been just meters away from a rhino earlier on. This was different, he said, because he had startled the other one. This one wouldn't be. As we continued on our way he pointed to claw marks about three meters high on some of the tree trunks. He said these were made by a sloth bear possibly searching for bee colonies or termites; they are swift and can be nasty if confronted.

Finally we saw the river ahead of us. But to get there we had to pass through 250 meters of swamp grass some three meters high. There was no way around it. By now the sun had set and dusk was settling in rapidly. Lord knows what we might confront--pythons, poisonous snakes, rhinos, sloths, crocodiles, you name it. But we made it through to the edge of the river with no more than frayed nerves. Now we searched along the river's sandy edge for one of the lodge's dugouts so that we could cross the river. During the day one could spot the occasional sand bars, but they would be difficult to detect in the dark. Besides, we hadn't forgotten what we had learned earlier—that we were in the crocodiles' habitant. Even though it was now pitch black our guides had found a dugout that they used to float us downstream. Before long, to our great relief, we saw the Lodge's lights a quarter of a mile ahead of us.

Fearing something might have gone wrong, management had hung strings of lights along the walkway and in front of the lodge.

After we had "docked" and were walking up the steps, the manager came to greet us saying how relieved he was that we were back safely. Others were standing along the upper railing. We were the center of attention. Back inside the office I saw the manager motioned to our guides to step aside. Vicky and I surmised that they were going to get a good talking to; and we guessed that because the Lodge had only recently opened the staff, including our guides, were still learning the ropes. For my part, I thought we had gotten more than our money's worth from the walk and tipped the two accordingly. Vicky thought they had messed up.

After we had eaten the food the cook had saved for us I assured the manager that I thought highly of our guides' resourcefulness, knowledge of the area, and their courtesy. We were happy with the day's events. As we headed for our room I noticed Vicky limping. She had worn blisters on both of her feet without saying anything to me about it. Tough gal! Now, we understood why we had gotten off to such an early start. Our day had been packed with activity. Back in Kathmandu I told Madhab about walking in "tiger territory," or at least that's what the Park's brochures advertised. Laughing, he replied, "Not a single tiger had been spotted there over the last four years."

Once settled at the Oberoi, I began preparing for tomorrow's debriefing in the morning and my seminar in the afternoon. Nervously, I reviewed my notes and touched up some of the overheads. I was right to have been nervous because my debriefing with Rajbhandari and Prayog Pradhan went badly. Both thought I would produce questionnaires, with examples, whereas what I gave them was a strategy and a design. My thought had been that *anyone* could do the questionnaires. Besides, hadn't I asked for inputs from both of them during my initial meeting with them? But, Dave got me off the hook nicely by saying he would produce whatever questionnaires they wanted. In contrast, the seminar I gave in the afternoon came off nicely. About 25 attended comprising officials from the Department of Irrigation, the Asian Development Bank, and AID, as well as a few interested consultants. They seemed to understand and appreciate what I had to say, as evidenced by the lively and constructive

discussion that followed my presentation. I returned to the hotel to swim with Vicky and have a beer at pool side. That evening we dined at the Gurka Room, another fancy restaurant within the walled off area surrounding the hotel. So, a day that began poorly ended up well. With yesterday's meetings out of the way, I still had to finalize my report. That included making minor revisions to the text and finishing annexes covering t-tests, linear regressions, and rate-of-return calculations. Though I still was not satisfied with the statistical annexes I gave up at 2:30 a.m. and went to bed.

Vicky and I had wanted to visit Lahsa, but found it difficult to arrange for visas and modify our flight plans; so we booked a flight on Everest Air to see Mt Everest up close. After a very short night we boarded the flight at 6:30. Our sleek, twin engine plane carried 24 passengers seated in a single row on each side of the narrow cabin. Initially, we flew over tilled farm land, pastures, and wooded hills until we entered the mountains. Then, our pilot gradually threaded his way through steep mountain openings. Up and up we climbed until finally we could see the sides of the mountains closing in upon us. Suddenly the majestic, snow-covered Mt Everest loomed in front of us. And cameras began clicking. By then I figured we would be unable to climb any higher and would have to turn back. But I wondered if we had enough space for the turn. Then, thinking I had worried enough, I exhaled and relaxed figuring the pilot knew what he was doing. Besides, we were totally in his hands. Our pilot did execute the tight turn, but not without bringing us terribly close to the mountain walls on either side. Once completed we all let out a collective sigh. Then we heard the other passengers begin to clap. Before the turn, I was thinking about my Uncle Vance, who was still piloting a light plane when he turned eighty and how he would talk about hammerhead stalls. The maneuver, as I recall, involves forcing the plane into a stall at which point it flips over and descends along the same path it had been climbing. No circling room required. I don't think he ever tried it; and I doubted if a plane the size of ours could do it.

We were back at the hotel by 10:00, rested, then went with Karen to walk around a popular tourist site to view Patan temples and browse through gift shops. That evening Dave, Karen, and their kids joined us for dinner. We left Kathmandu the next morning. overnighted in Bangkok, stopped to spend a few days with Mike and Jackie, and were back home by April 30.

6/4/12

9/2/17

Chapter 21: Peru Revisited

In early January '95 I got a call from Enrique Moncada, a Peruvian who had graduated from CSU's Civil Engineering Department with a focus on water resources planning and optimization. He was currently consulting for the Peruvian Ministry of Agriculture. He wanted to know if I were interested in coming to Peru to help him prepare a feasibility paper on soil and water conservation and poverty alleviation at several sites in the Andes. If the study could justify the project, the Japanese Government would allocate \$100 million for the cost of training Peruvians and paying for technical assistance and equipment. The World Bank in collaboration with the Peruvian Government would supervise expenditures. The UNDP would cover the cost of my contract. Through phone calls and faxes we agreed on my terms of reference. I, was scheduled to arrive in Lima in two weeks, accompanied by Vicky. This was one of those "out of the blue" calls that would lead to another international assignment. Because feasibility studies related to poverty alleviation were my *forte* and Vicky and I both knew and liked Peru I accepted the assignment without thinking twice. I agreed to estimate the potential for improved soil and water conservation and the resulting reduction in rural poverty; develop a program for conservation and poverty alleviation that identifies projects, estimates budgets, identifies participating institutions, and suggests an implementing strategy; evaluate the availability of suitable personnel for implementing the above; and propose procedures for evaluating program goals.

I learned that Ted Sheng and Bob Barrett would be working on the same project, but not under Enrique's direction, arriving there after my arrival. Ted was widely recognized as an FAO expert in watershed management. Bob Barrett, would accompany Ted because of his experience with GIS as applied to natural resources management, and his knowledge of Spanish, which Ted does not have. Ted's involvement would be interesting because I already knew him from a trip

we took to Jamaica and because he was Tom's father. Ted and I agreed that we should stay at the same place in Lima.

Our overnight flight from Miami put Vicky and me into Lima at 6:30. Fortunately, it was Sunday, which gave me time to rest before having to go to work immediately. Enrique had made reservations for us at the Gran Hotel, a nice, but modestly priced hotel in Miraflores. I knew this area well having stayed in San Isidro, the bordering residential area. After a short nap, we walked through the central park where many artists were displaying their paintings. Later, we visited a pizza parlor filled with tourists, a place I had not been before.

The next morning I took a taxi to the Ministry of Agriculture. As we drove down the eucalyptus-lined Salavarry Ave past the Iowa Mission, I recalled with pleasure the many days I spent there when I was working on Plan Meris 20 ago. And here I was back again. As I got out of the taxi by at the main entrance Enrique greeted me. Although we didn't know each other, he had told me where to meet and I guess I just looked like a *Norte Americano*. And Enrique looked like a Peruvian: short of stature, sturdy, dark hair, and just a tinge of brown to his skin. With him was Gonzalo Pajares, who also looked Peruvian. Both appeared to be in their early forties. Gonzalo would advise me on the work of Pronamachcs¹. He would turn out to be of great help. He had a BS in Ag Engineering from the National University of Cajamarca and a master's in soil science from the University of Ghent, Belgium, had been a consultant for the past six years, the Executive Secretary of the Consortium for Non-Governmental Development, and had been associated with Pronamaches for ten years, ending up as its Executive Director. Despite these credentials, he looked to be more open and friendly than the more reserved Enrique. They both spoke excellent English, which meant I wouldn't have to stumble with Spanish while working with them.

As part of the formalities Enrique introduced me to his bosses at the Ministry. Then we walked the short distance back along Salavarry to the office where the three of us would work.

¹ The abbreviation for the Spanish version of the Program for Water Basin Management and Soil Conservation

Our office was in a two-story, modern building. It was large enough for us to spread out yet be close enough for easy access to each other. Besides the three of us others, occupying the same flat of rooms were a couple of engineers working with Enrique on other projects, a secretary, a typist, and a bookkeeper. We spent that afternoon and the next three days getting to know each other and what each of us was expected to do.

As our team leader Enrique was responsible for delivering the results of our study. The broader objective, it seemed to me, was to use this project, assuming it's success, as a model for greatly expanding the World Bank's support of similar activities in other South American countries, which put a huge responsibility put on Enrique's shoulders. Aside from an occasional show of anxiety, Enrique was calm, collected, and effective. We got along fine. He maintained effective liaison with both the Ministry of Agriculture and the World Bank. Gonzalo with his extensive experience with Pronamaches and Extension would provide the technical information about agricultural production and conservation. And I would be responsible for seeing that the form of our report would be acceptable to the World Bank—along its standards for Project Approvals and Evaluations, which I knew well enough. I would set the procedures for the socioeconomic analysis and write sections of the report related to these topics. I was also responsible for developing the budget.

Having agreed to our individual tasks, we began planning for a trip to Cajamarca. Part of the attraction there was its reliance on private enterprise, the National University of Cajamarca, and the conservation work of Pablo Sanchez. I found it interesting that Enrique and Gonzalo had chosen this location as the first of our two field trips, because that was Axel's first choice for the Plan Meris study. Enrique explained that he wanted us to observe conservation needs and practices and farming activities so as to gain ideas on how our project could improve things. Before leaving Vicky and I checked into the Hostal Residencial Alemán located on Avenida Arequipa in San Isidro, not far from the Pensión Cortes.

A few days later Vicky and I caught an early morning flight to Trujillo where Enrique with his son were waiting for us. After lunch Enrique drove us to Chiclayo for lunch then to Jequepeque, one of the major dams whose reservoir provided irrigation water for the nearby coastal areas. The Incas called dam site *Gallito Ciego* (blind chicken). The next morning we rode up the tortuous road to Cajamarca, 9,000 feet above sea level where it was cold and rainy. After locating Gonzalo we drove 30 km northwest to the Cooperative *Atahualpa Jerusalan*, also known as *Granja Porcón*. There, we met Alejandro Quispe, the founder and general manager. Alejandro established the cooperative 20 years ago when the Government allotted him 12,500 ha as a result of Peru's Land Reform program. The upper-most part of their holdings reached 12,000 feet.

Alejandro described how he had been able to obtain financial and technical support from the Ministries concerned with Water and Forestry, the Belgians, and NGOs in which the 100 families of the Cooperative contributed their labor. With the aid of earth-moving equipment they cleared and shaped the land, built the irrigation delivery systems and holding ponds, developed pastures, and planted eucalyptus and pine. Over time, they have been able to provide the families with homes and accompanying utilities, a communal hall, a church, a barn and warehouses, and a repair shop. They now have four Massey-Ferguson tractors and one of Chinese origin.

Cooperative objectives have been to become self-sufficient in meeting their food requirements and generating the cash needed to maintain and expand their holdings. They have adopted modern cropping practices, have improved their cattle through artificial insemination, established a dairy and are producing textiles. They even had consultants study the possibility of making cheese, butter, and bread and building a sawmill, but were informed that nearest large market, in Cajamarca, could not absorb enough of their production to make these ventures profitable.

Proudly, Alejandro drove us around this estate to show us their large tree plantations. He related how the local pulping company had contracted to buy half their output of logs, allowing Cooperative members to cut the lower branches for kindling. He told us that their two-km-long irrigation canals allow them to irrigate 400 ha of crops and pastures. Proudly, he showed us their large Brown Swiss herd, and finally their tree nursery that has produced over a million seedlings.

Alejandro said he reports to no government official. As a private enterprise he must abide by the law and pay taxes, relying on a lawyer whom he hires as needed. He admitted that he has little education, but he is proud that the vision of the Cooperative he had 20 years ago along with luck, hard work, help from others has been realized. They have created a pleasant environment of trees, plants, and animals. The idea is to make this a good place to live so that their children will not want to move to the city. Lands are held in common, not individually, although some members want to own their own plots. He encountered considerable resistance at the outset because the locals associated cooperatives with communism and wanted no part of that. So, he organized the collective as a religious group, becoming Protestant in the process. He does not allow alcohol to be sold in the area, while adding that what people do in their homes is their own business.

Finally, he told us that his major problem has been those who are unhappy with the way they share cooperative earnings. He has been able to resolve such discontent by listening to their grievances then he convenes a meeting of the general assembly that advises him about what to do. With all this success he surprised us when he said that it's time to pass the job on to someone else. We thanked Alejandro for spending so much of his time explaining their accomplishments. As we drove away we thought, "What a success story!"

The next morning we met Pablo Sanchez at the Univ of Cajamarca. By now he had become renown for his work in hillside conservation. He drove us out to one of his latest accomplishments: a rural demonstration home that cools through evaporation, provides interior

areas for growing plants, a mud roof that protects against the summer heat and winter cold; a block in front of the entrance guards against the wind, and a small fishpond outside the building. All materials are clay or wood, except for a few small photovoltaics. He said the idea is to provide improved housing in a natural setting intended to keep people here, rather than having them migrate to the coastal cities. I found that his creativity hadn't slowed one whit since I met him 20 years.

Later, one of Sanchez's associates, drove us to the nearby town of San Marcos. Along the way we observed highly eroded areas that would benefit from soil conservation and an area planted in eucalyptus that hadn't fared well because of poor soil and low rainfall. We stopped along the way to visit one of the cooperating farmers. The homestead by the roadside was a single small building. The farmer introduced us to his wife and three sons. Stepping outside we observed a peach tree, a small vegetable garden, a milk cow tethered in a small pasture, and one of the daughters feeding a sow and two young pigs.

With pride the farmer pointed to an area that he and his neighbors had cleared and planted in potatoes, maize, and beans. Down a hillside was an interceptor ditch² in a field strewn with rocks. He said the field, which was in the early stages of development, would in five years look like the field we had just seen. With pride he attributed the improved field to his neighbors having helped him, rather than through some cooperative. Before acquiring this hardscrabble land they had lived in the Cajamarca where he was as a bricklayer. To us, this appeared idyllic, but then we couldn't see the backbreaking work, worry when rains are late, illnesses in the family, or children who might yearn for higher education.

² Earlier, I had learned that these ditches filled with gravel are foot across and two feet deep. Their intent is to capture rain water flowing down the slopes that then percolates into the soil. Eventually, this soil becomes moist enough for grass to be grown. In time, the affected area stabilizes enough for crops to be grown.

Giving our thanks to the farmer and his family for spending time with us, Ernesto drove us to San Marcos. As we drove Ernesto elaborated on Sanchez's vision for the area: hillsides protected against erosion via the interceptor ditches, the expansion of forestry, individual farmers with two ha in crops and three ha in pasture, a milk cow and a few head of cattle. The improved land would be passed on from father-to-son(s). Trees planted to improve the ambience. NGOs lending picks and shovels for building terraces and interceptor ditches. Some farmers receiving loans for the purchase of oxen with a low monthly interest rate. Pablo said that they have not had a single default in three years. Thus, nothing is given free. All must be paid, except in a few cases where the land is so poor that FONCODES³ gets involve.

It was past the lunch hour when we arrived at San Marcos. Rather than look for a restaurant, Ernesto took us to a cattle auction on the edge of town. By arriving late, our options were limited. We ducked into a long tent where several women were lined up behind tables serving what remained of their offerings. Besides potatoes and a few vegetables our choice of meat was limited to *cuyes*. These are guinea pigs raised locally as a delicacy. Noting our hesitancy Ernesto urged us to try them. Looking at each other Vicky and I finally shrugged so much as to say, Why not? But then we had to pick two out, much like choosing live lobster in a tank. However, these were different. The stared at us from their cages, their noses twitching on the wire screen. That gave us pause, but only momentarily. Soon the cook offered each one on a plate to us. They were beheaded (thank god), split down the middle, and nicely browned. The most disturbing part was seeing the "fingers" on each of the paws tightly clutched as though to say, "Oh, that hurt!" The meat was tender and savory. But I don't think we'll do that again.

Our last visit was atop a 10,000' mountain with a view that was incredible. We got out of our Land Rover to walk a narrow path to where some farmers had recently cleared the land. Ernesto wanted to show us how the farmers there had succeeded in growing crops on these very

³ FONCODES is the Spanish acronym for the National Fund for Cooperation in Social Development.

steep slopes without causing more than minor erosion. Looking down I judged the slope to be at least 45 degrees. I felt that should I trip and fall I wouldn't be able to stop myself from tumbling to the bottom of the ravine. Farmers had built interceptor ditches about four meters apart then planted fast growing trees along the ditches that helped stabilize the soil. Contoured furrows guided rain water long the slope first one way and then back again. We saw good stands of potatoes (the preferred crop), maize, beans, and yucca. It had taken extensionists considerable time to convert farmers away from planting potatoes vertically. This practice, passed down from one generation to the next, allowed water to drain from the tubers to prevent rotting despite the erosion this causes. The sun had set by the time we returned to our hotel.

The next morning we met with the Council of NGOs. A representatives from each of the organizations was there. After each representative described his NGO's activities the chairman provided a summary. Together, they devote half their effort to agriculture, a third to natural resources, and the rest to health and sanitation, agro-industries, training, publicity, and administration. They feel that their efforts make an important contribution to the income and welfare of those in the region by augmenting Government activities. Their first priorities include food security, household income, water conservation, and community affairs followed by reforestation, soil conservation, infrastructure, sustainable agriculture, and local government. The Council has a cadre of 200 technicians, with an average of eight years experience, who prefer to stay in the area and are proud that they do not subsidize farmers as does FONCODES. They said that farmers prefer working with us specially when farmers need timely inputs for establishing their crops. Sanchez, who accompanied us, said he was concerned about the coca problem, high transportation costs, and timely access to credit.

After the meeting with the Council the representative of the Education NGO invited us to visit his headquarters. We followed him to his office, which looked like someone's residence. He introduced us to their staff—a good looking bunch busily engaged in their work. The building had a central room filled with computers that were using up-to-date software, some of it funded by USAID, individual offices, and a conference room. Important are the training courses they

give to farm leaders. I found it impressive to find something so vital and effective so far from Lima.

We next visited another NGO. This one focused on agriculture and conservation. Our contact showed us a video of a campaign in Puno aimed at generating farmer support for building terraces and irrigation delivery lines. Hundreds celebrated with a procession that wound its way through town. Youth competed in various games. As part of the festivities the NGO provided training on how to use a surveying level that is so important to hillside irrigation. He said that it was not difficult for them to carry off this affair because farmers and villagers see this as a pleasant break from their daily grind.

After a brief stop at the Pronamaches office in Cajamarca we headed "down the hill." It was a terrible ride. I thought our driver was out of his gourd. But, *gracias a Dios*, we made it. Once we reached the coastal area Gonzalo arranged for us to meet a group of farmers who relied on water from the *Gallito Ciego* reservoir. Although they claimed to be an autonomous group Gonzalo told me that they were parastatal since the Government pays the salary of the organization's president and provides funds and advice as well.

We met in the group's conference room located in the small coastal city of Guadelupe. Those president were from the water users' association, representatives of the rice and maize producers, and representatives of two women's organizations. They poured out their problems to Gonzalo and me. One after another they told us how Government representatives were promoting a "grand irrigation scheme." Fifteen thousand families were to be settled on 48,000 ha. After years of waiting the dam had finally been built, but little else: no delivery channels, distribution systems, drainage channels, or control and measuring devices. Even so, their association had devised makeshift ways to deliver water to some of their fields. But the lack of drainage has resulted in salinity problems. They had not been able to agree on a water tariff that was large enough to cover the costs of O&M and repairs. So, parts of their system were breaking down. They found that rice, which they had grow on the plots now inundated by the reservoir,

required too much water. So, they had been forced to shift to other crops. One of the promoters of the scheme had talked to them about growing sugar cane. But that too didn't turn out because they lacked access to a sugar mill. They said they were not looking for handouts, but something needed to be done to address their needs. Could we help? This had been an embarrassing meeting. They thought that I was a World Bank representative who had come to help them. Weakly, I promised to describe their problems in my final report. The sun had set long ago by the time Gonzalo and I drove back to *Gallito Ciego*.

Early the next morning Enrique knocked on our door to say that we were scheduled to meet Rojas Vasquez, the Executive Director of the Jequetepeque project. Right off Rojas asked how our meeting with the water users group had gone. I hadn't realized it at the time, but he had arranged the meeting at Gonzalo's request. We said fine, but that the group wished the World Bank would respond to their requests. He then went on to tell us about the Jequetepeque project and his responsibilities as Executive Director. He explained that the initial plan included distribution and drainage canals, but that these had been left out, along with the customary five-year breaking-in period to organize WUAs, develop rules and regulations, and recommend cropping patterns, just as we heard yesterday. Farmers from the area had grown rice for years, when water was available, and expected to increase land put to this use as Jequetepeque delivered more water to them. Some farmers have 20 ha or more because they owned this amount of land beforehand and stayed where they were. Others, who were displaced by the reservoir, were given land for farming and a homestead. Rojas continued by saying that the rate of silt buildup in the reservoir is on target, which means that it should function for another 50 years. Then, he told us that his responsibilities include more than the dam, reservoir, and irrigated area, but all of the watershed supplying Jequetepeque; including Porcón. He was proud of that development, but pointed out that the soils and living conditions are better there than those below the dam.

Thinking he had worn out our ears, Rosa said he wanted to give us a tour of the area. He showed us the dam up close, some of the areas under irrigation, measures taken against erosion,

and their drip irrigation experiment for growing grapes, papaya, and mangos. He was especially proud of their experiments with earthworms, and how after being placed in the soil they quickly begin transforming it into rich, black loam. They have found that these worms, which came from the USA, produce half of what they eat in organic matter within a day. Following him down a path he showed us eucalyptus groves that do not compete for water with other plants because water is abundant. They have built terraces and interceptor ditches. All this can be used as a demonstration of responsible watershed management. Finally, he said that he maintains close contact with the faculty at the Univ of Cajamarca, including Pablo Sanchez whom he admires greatly, the research going on there that is so relevant, and its MS programs in soils, water, and forestry. After visiting to the gift shop where he gave us each a T-shirt with the *Jequetepeque* logo, we thanked him profusely and left.

Enrique deposited Vicky and me at Pacasmayo, a beach resort area north of Trujillo, while he and Enrique Jr returned to where his family was staying. Vicky and I strolled along the beachfront then stopped at a small snack bars and ordered *ceviche* and a beer. By now we had learned to savor this popular delicacy. Later, Enrique drove us to the airport for our flight to Lima.

Going down to breakfast the next morning I saw Ted Sheng and Robert Barrett. This time I learned a lot about watershed management, by listening while Ted talked. After Ted and Bob had "been to the field" a couple of times, Ted turned critical of what the Peruvians were doing by making *soil erosion worse*! Besides, he said, they were not using a watershed approach but simply dealing with conditions on individual farms. I wondered about this, given his short time in Peru and the international respect given Pablo Sanchez and his conservation program. But I remained quiet not knowing enough to challenging his conclusions. After Ted's and Bob's second trip to the field they talked about their "white knuckle" experience coming down the mountain saying they were glad to get back alive. Eventually, Ted proved most helpful to me towards the end of his stay when I was preparing the budget for our proposed program. He identified equipment and the costs associated with the conservation activities we

were proposing. I suspect I could have gotten good figures from Gonzalo, but Ted's knowledge of the subject helped me get started.

When I returned to the office I met with Enrique and Gonzalo to talk about what we had learned. Gonzalo used the blackboard to list topics relevant to our study and how they related to each other. I was impressed with his command of the subject. But why not, with his years of experience with Pronamaches? Now, we were ready to begin work in earnest. I was to prepare an outline of the report according to the Bank's Staff Appraisal Reports.

In a couple of days we came together and decided on the following responsibilities:

Enrique would keep those of the Advisory Committee and the World Bank appraised of our progress. He would propose project goals, finalize the budget, obtain agreement as to where project offices should be established, and propose selected Peruvians for graduate study abroad. Gonzalo would cover the type and costs of conservation, liaise with Pronamaches offices concerning soil conservation, farming practices and credit, and describe social customs according to regions of the country; and I would set the background for the socio-economic evaluations based in part on my readings of Georgegescu-Rodan, Solow, and Pigou. I would work out illustrative investments for development of new lands, improvements to existing lands, establishing forests, and investments in dairy production and irrigation. I would set the stage by writing about Project Objectives, Strategy, Technology, Socioeconomic and Financial Analyses, Project Impact, Risk, Finance, M&E, an Economic Summary, and a Bibliography—all in English, even though my contract required me to write these in Spanish.

⁴ For example, see Georgescu-Roegen, Nicolas. 1975. Energy and economic myths. In *Southern Economic Journal* 41(3): 347-381; Solow, Robert M. 1974. The economics of resources or the resources of economics. In *American Economic Review* 64(2) (May): 1-14; and Pigou, A. C. 1932. *The economics of welfare* (4th ed.). Macmillan: London.

The next day I observed that Enrique and Gonzalo already had begun typing based on some scribbled notes. They must have had their thoughts clearly in mind, while I was still thinking about my approach. Sensing my confusion Enrique wondered if we would complete our individual assignments on time. But, soon I began writing in earnest, which eased the tension. Before long Enrique and Gonzalo were planning our trip to Ayacucho and Cuzco. During this time we were experiencing summer weather in Lima where the long cloudy months finally give way to beautifully clear days, and busloads of the young were headed for the beach while we sweated away in an office without air conditioning. Not that I minded.

At noontime when I worked at the office I would search out one of the several small restaurants nearby. Generally, the front would be a bank of windows and a door opening directly onto the sidewalk. The eating area was small, perhaps 20' x 30', a row of three tables seating four would line the two side walls, the kitchen was in back. The menu was simple, but to my liking, offering a choice of fried freshly caught fish, thinly cut beefsteak, or chicken. I eventually got used to the combination of potatoes, rice, and a vegetable served with the meal. Freshly made papaya juice was a favorite of mine. The cost was low enough to appeal to the average person off the street. At evening the operator would close down by rolling down a flexible metal panel.

When I stayed at the Hostal, where I had fewer distractions and thus could get more done, Vicky and I would often eat lunch or dinner together, sometimes both. About the only thing we could get at the Hostal was a grilled ham and cheese sandwich, which along with a beer tasted pretty good. At other times we found a variety of places within easy walking distance that we liked: one was the pizza parlor where we went upon our arrival, a simple *chifa* across Arequipa, a nice fish place that served mussels as an appetizer, and, eventually a small mom and pop start- up just around the corner where we, as possibly their only foreign clientele, received special attention. They were recent arrivals from the Sierra who had just getting started in business. One evening we went there for a late snack after having—lunch at a nice Italian restaurant in Miraflores. I had planned on ordering something light. But I made the mistake of ordering a

hamburger deluxe. What made it deluxe? A fried egg on top! With the owners hovering over us to see if we liked our meal, I felt forced to leave nothing on the plate. It was during these casual outings that Vicky confided hat she found this trip interesting, as opposed to her recent experiences in Lahore.

I spent much of the morning, on the day we left for Ayacucho, talking with Enrique about what we had written and in listening to Gonzalo talk about Puno. Around noon Enrique informed me that the two of us were scheduled for a 5:00 p.m. meeting at the Ministry of Agriculture. Once there we learned that the chairman of the Advisory Committee was meeting with the Minister and that another member would take his place. I don't remember much of what was said, only that it was mainly a rehash of what we already knew. I was distracted as the discussion dragged on because I feared I would miss my 7:30 flight. At the last minute Gonzalo showed up with a driver to take us to the airport where Vicky was waiting for us. Our flight was short and comfortable and once we arrived I noted the cool freshness of the air in this ancient, highlands city, and the brilliance of the stars. Just a beautiful evening. We checked into the Hostal Maison Plaza on the central square. We followed the porter up the stairs then along a narrow hall, with replicas of classical paintings adorning the walls, which pleasantly reminded me of Spain.

Early the next morning Gonzalo introduced me to his friend, Eduardo Acosta Portilla, who would be with us the rest of our time here. He had arranged for a driver to view the Cauca Valley. Along the way we saw wild vicuna and domesticated alpaca. He said llamas are mostly at the higher elevations. I learned that much of the area must be irrigated, although some farmers plant a short-season crop, such as peas, in the hopes that the rains will be sufficient. We continued along dry, dusty roads to higher elevations, passing by a village that had been severely damaged by an earthquake four years early, and now totally abandoned.

Moving on we reached an area with an extensive irrigation system. Some were in areas with steep inclines that relied on drop boxes to dissipate the energy of the falling water. Stopping along the way we learned about a local priest who helped build one of the irrigation structures. When we asked farmers what they wanted most, they said to have their delivery channels lined. We learned that the main crops are potatoes, alfalfa, maize, barley whose flour is used in soups, and peas. Besides the alpacas in the wet grassy areas we saw Holstein cattle, sheep, and oxen. Some of the cropped areas were large enough to be plowed with a team of oxen while other areas must have been tilled by hand. Some of the farmed slopes were steep, but most of the land under cultivation and pasture was bottom land. Family income here mut be low with limited potential for improvement.

We stopped for lunch at a small village that was in the midst of a celebration devoted to the Virgin Mary. We learned that it had been going on for ten days! The people must have been dressed in their finest, a band was playing, couples were dancing, and some obviously had been drinking. It was here that Vicky and I searched for an outdoor privy. What we found was a ramshackle affair with gaps in the siding and nothing that even approximated a stool, just a hole in the ground.

Eduardo said he doubted that few of these villagers favor communism, although earlier they might have supported the socialistic efforts of President Velasco. Because of the country's severe economic problems 15 years ago the Government reduced Ministry of Agriculture staff from some 100,000 to about 2,000 at present, which eviscerated Pronamaches. But then the NGOs stepped in to fill the gap. They hired many of those laid off by Pronamaches. By careful selection and offering higher pay and longer contracts the NGOs have developed a highly qualified and motivated staff. So, the work goes on.

Traversing these high mountain roads was breathtaking. The Peruvians with us were as much in awe of the scenery as Vicky and I were. At one point Vicky, with her keen eye for wildlife, spotted four condors high above us. Our driver stopped the Land Rover and we all got

out and watched in awe. These four were riding the air currents high above the river below us. They looked more like ultra-lights than birds.

On our drive back to Ayacucho I wondered what to recommend about an area such as this. Nothing obvious creased my mind. Better to let those working the area decide what to recommend. The most I could do was put forth some principles to guide Enrique and Gonzalo. I thought that would be better than trying to propose unwise choices. However, I did note the need for soil and water conservation because of the farming occurring on these steep slopes.

We began the next day by going to the city's edge to look at the *andenes* (Inca terraces) that are still in use. The farmer we encountered said most of them rely on an irrigation network whose water comes from springs above the city. Good rainfall during a three-month period makes it possible for farmers to grow short-season crops. Eduardo judged the soil to be a silty loam probably with neutral pH, which would be good. We saw lots of alfalfa and some pumpkins and potatoes. We saw a farmer plowing a field with a team of oxen, children picking up potatoes from the up-turned soil, and considerable flat land devoted to pastures where cows were grazing. We talked with a farmer who said he could work as an engineer but now farms instead. Gonzalo thinks he might have been one of those laid off because of the budget cutback. This farmer said that everything is going well enough even with the low commodity prices, high input costs, and little credit. He blamed low commodity prices on imports. He routinely gets his soil tested by either a private company or the Government. While the latter costs him less, its services are not always available. When we asked which is best, he said it depends on the one doing the analysis, which made sense to me.

Continuing on, we talked for nearly an hour with a farmer who looked to be 60. He says he farms a third of a hectare, has two sons, one of whom is a professor, and a grandmother who still lives with him and his wife. He says that at times during the growing season he must hire day-laborers paying them the equivalent of five dollars a day, sometime with food. He too said commodity prices are currently low. Puzzled when he told us he paid two prices for alfalfa, he

explained that the lower price require the buyer do the cutting. He said that there's not much of a market for maize because most families produce just enough for their own consumption. Because the prices for broad beans and potatoes are so low they only produce these for their own consumption. Although the present lack of rain may become a problem, for now the irrigation ditches are running full. Just a lot of questions about farming that updates Gonzalo's knowledge while educating me.

When we stopped to talk with two young men working close to the road Gonzalo asked if they had ever received training in irrigation. They said no, they knew how to do that. When we asked if they irrigated at night, they said no because it's cold and difficult to see what's happening. From that we concluded that while water may not be abundant it's not critically scarce either.

By early afternoon Gonzalo thought we had seen enough. So, we stopped for lunch at a place that served Andean food. Gonzalo suggested I try the popular local drink that looked like *chicha morada*, a non-alcoholic drink made of purple corn. What I got instead was 18 ounces of a mildly alcoholic drink. Not wanting to waste it, I finished it all and got a light buzz. After a short siesta at the Hostal Vicky and I strolled the streets for a while and ended up visiting the Santa Catrina Convent that dates back to 1579. By dinner time Vicky felt she had already eaten enough and Gonzalo was off his feed so I wander the streets until I found a small place where I ordered soup, bread, and beer.

Once back in the hotel, I turned on the TV so I could have better light, but muted the sound. Vicky who had gone to bed turning her face to the wall. Then, I reviewed my notes. Gonzalo, given his engineering background, thought it would be better if the *andenes* were not so high. Even so, many were in surprisingly good shape given their age. He surmised that high land prices resulted from the high crop yields and favorable markets and that the abandoned *andenes* we had seen were due to a dried up water source or deteriorating soil quality.

Sunday morning we took the short flight to Cuzco. Once there we checked into the Cuzco Hotel, a four-star tourist hotel, but in name only hotel. Even so, the place charmed me with its Spanish architecture and a suggestions of the Colonial era. But the food and service left much to be desires. And it was dusty! Meanwhile Gonzalo had rounded up one of his Pronamaches contacts and we headed to his headquarters. Once there we met the Chiefs of two districts in the Cuzco Region that we would be visiting: Aristides Choquevilca for the Anta District and Zapatero for the Cuzco District. Aristides explained that he is responsible for four agencies within the Anta District. Within each agency are twelve professionals and 30 support staff in the main office. Together, they are responsible for improving 450 ha of crop and pasture lands, developing 2,000 ha of forest land, providing technical assistance, and conducting training programs. For this year their program was to build 36 infiltration ditches and six ha of bench terraces, and plant 230 ha of trees. Next year they plan on adding *slow forming terraces*. Of the various ways of increasing their areas of production this method is perhaps the one they prefer most. While it may take several years for them to "mature," practically all of the "cost" is the farmers' own labor.

Both Aristides and Zapatero accompanied us as we climbed a mountain side so as to gain a good look at the valley below us. On our way we could see *zanjas de infiltración* that Pronamaches had helped put in place, but had not been put in use yet, waiting for them to

⁵Slow-forming terraces are one of farmers' favorite ways of expanding their land under cultivation. Farmers build them, often as a cooperative effort among neighbors, by 1) cutting into the sloping soil so as to form a nearly level area perhaps five meters across, 2) building a stone wall above the cut and another one below the cut, 3) digging an interceptor ditch at the up-hill side of the leveled area 4) building a berm on the down-hill side of the leveled area to keep the soil from washing down hill, 5) planting small shrubs to stabilize the berm, 6) over time allowing the water trapped in the interceptor ditch to filter under the leveled area, 7) planting grass or allowing some other ground cover to stabilize the area, and 8) finally converting the area to crops.

"mature" to the point the land would be ready for planting. The veterinarian accompanying us said that the farmers should wait for about three or four years for the grasses to become established before allowing livestock to graze them. Just how many years depends on the rainfall.

The community seems able to get its membership out to improve the land. In the case we saw, the majority of the community of 350 members had worked a single eight-hour day. Apparently, those who did not would not share in the benefits of these improvements. With an average family size of seven they are able to bring considerable amount of labor to these land improvement projects. Only the very young or feeble would be exempted from helping out.

On way back to town we stopped alongside the road at a pig roast where were treated ourselves to chitlins, roast pork, *and choclo* (large-kernel Andean corn). I treasured these experiences because they gave me a feel for the country and its culture. That evening, Vicky and I walked around the plaza. It was a lively place with lots of tourists and locals with their items for sale spread out on the sidewalk of the arcade.

We had an early meeting at Pronamaches headquarters attended by four District Chiefs (including Aristides and Zapatero) and representatives of the Ministry of Agriculture and an active NGO. We sat in a pre-fab conference room around a large table with a projection screen at one end. The chairman immediately started the discussion assuming, I think, my Spanish was better than it was because he talked at a faster clip than I could follow. I had prepared comments on our project and what I hoped to learn from this meeting including details of their conservation measures, their thoughts about crops, livestock, and forestry. I began by expressing my gratitude for having so many present and my delight to be back in Peru again. One of the Chiefs said that they try not to compete with other agencies. Instead, they support small projects whenever they can mainly through technical assistance, training, and occasionally nutrition. Then we got into a

lot of detail on topics we already knew about. Rather than being redundant, we found it useful because it helped to reinforce what we already knew and added some things we hadn't known.

As our meeting was breaking up, Andrés Loayza leader of an NGO suggested that we might like to learn more about their program. So, we followed him to his headquarters. On the way we passed through a fertile area that I thought looked familiar, then realized that this was where Vicky and I had attended the Inti Raymi festival! Once we had arrived at his office, he told us about their program, whose main thrusts were 1) family health through nutrition, 2) food security by improving yields, building storage facilities for *papas*, and providing credit, 3) cooperating with other communities on soil and water conservation, 4) advising on irrigation practices, and 5) developing forestry. His NGO hoped that some of the participating laborers would learn masonry. Gonzalo nudged me when Andrés told us about farmers not being interested in conserving communal lands, saying "I had told you about farmers' feelings this way." He also said that he thought Pronamaches should be focusing on the better lands. While I didn't remember our discussion, I certainly agreed with him about working on the better lands, rather than trying to save them all. The meeting ran on for nearly three hours.

Next, Andrés took us one of their sites. We visited their seedling nurseries for eucalyptus, fruit trees, and flowers. The eucalyptus seedlings will go to steep communal hillsides, the fruit seedlings for family consumption, and the flower seedlings for sale in the market. Next, we followed him up a steep grade to one of the *microcuenca* (small valley) to a village nestled against the side of a steep mountain. As we rode through the narrow, and winding cobbled streets to a lookout point with a beautiful view where he pointed out a small reservoir below us that they had built using German and Dutch funds. They had used reinforced concrete, not stone and mortar as is the local custom. The concrete channels ran all the way down the mountain. He said that both Protestant and Catholic churches in the area had help organize this effort. Finally, Andrés told us about a reservoir supplied by spring water that they had sponsored costing \$10,000. One hundred and twenty families in this village benefitted from

the resulting irrigation system Now, farmers can grow two crops a year, instead of one, which helps providing them a year-round income, as well as providing electricity for the community.

After returning to Cuzco we went to Aristides' office where he showed us slides of their activities including how earlier the locals had burned the trees and allowed sheep to graze the hillsides, which became barren then seriously eroded. Then his slides demonstrated the results of Pronamaches's soil and water conservation program. It is gratifying, he said, that farmers usually are anxious to put into practice what they had just learned. From this show of interest, Aristides says they are able to identify who have leadership potential. This ended another long, but interesting day. The next day we returned to Lima.

Back at the Hostal Aleman I rested briefly, showered, and was back at the office by noon where I told Enrique about the trip. That out of the way, we talked about what we should do next. In the process he again expressed his worry about getting our report finished in time. Seems as though Enrique had finished a rough draft of his selections of the report and had turned to working on the budget. We agreed getting this done was high priority. By now I had decided I would describe five representative investments--opening up new lands, improving existing lands, upgrading pastures in support of dairy farming, new irrigation structures, and expanding forests as a basis for our benefit-cost analyses; and Eduardo and Gonzalo would cover investments in conservation such as slow-forming terraces, interceptor ditches, drainage, and pastures.

It was dark by the time I got back to the Hostal where I returned an earlier call from Axel. After welcoming Vicky and me back to Peru he turned me over to his wife, Carmen. We carried on a somewhat disjointed conversation, which I attributed to the language barrier. Later, I learned that I was not talking with the Carmen I knew, but Axel's *new wife*, also named Carmen! How was I to know? Ted and Robert joined Vicky and me for dinner at the *chifa* across Arequipa. Another long day.

Time was short for accomplishing all that I needed to do before departing—three weeks away. So, the pressure was on. Normally, I experience this pressure alone, but this time I was working with two competent professionals. At one point all three of us were off our feed, which I attributed to nerves. But not so with Gonzalo. Occasionally he had skipped meals during our last trip saying he had an upset stomach, which I guess he did because he soon found out that he had an amoeba! Even so, he showed up at the office most days without complaining. One day he came back to the office with a smile on his face. He had talked with one of his contacts at Natural Resources who said that our ideas about conservation and improving farmers' practices were "right on."

My next order of business was to prepared "cash flow" for the five representative investments that would be based on investment and operating costs, value of output to arrive at net returns over the life of the investment. These I discounted to arrive at private and social rates of return, as well as financial flows. This was the same sort of analysis I customarily make. Rather than go into extensive detail for irrigation, I "borrowed" the figures I had from Plan Meris. All but forestry showed favorable private rates of return. Irrigation was the most favorable followed by upgrading existing land, developing new land, and improved pastures, in that order. Despite the ranking Moncada and Gonzalo were most interested in developing new lands. Those who were already into dairy farming would be most interested in pastures improvement. I used these results to justify the economic viability of that part of our proposal dealing with increased agricultural production. The long time before harvesting trees was the reason forestry was marginally profitable from a private perspective. But then, the main purpose of forests, as well as other soil and water conservation measures, was *social*, which did not need as high a profitability measure as did the private sector. In other words, activities with an attractive rate of return to the private sector *implies financial viability*. In contrast, activities of high social interest but with a low rates of return, seldom are financially viable. Consequently they are subject to Government's rationing of its resources.

Having felt I justified our proposal economically, I turned to the budget—in all its detail. I have never liked preparing these because of the detail and my concern about omitting something important. Still, I have prepared many budgets and felt I was as qualified as anyone. Ideally, one should not be rushed and have time for outside review. Working long hours, often till midnight, didn't help either. Nevertheless, I plugged away with year-by-year estimates for five years for staff salaries, office utilities and other expenses, travel, conferences for the central office in Lima and a regional office in Cajamarca, as well as funding for technical consultants, vehicles, and equipment, local and international travel, and training and graduate studies abroad. Just a lot of detail. Of course, others will be reviewing my estimates and, as with Enrique, making estimates of their own. Finally, using inputs from Enrique and Gonzalo I came up with a budget of \$78 million.

The next day Enrique contacted an Advisory Committee member who said to *double* the amount. Enrique wasn't sure why. But this emphasis on making our proposal large reminded me of the Egyptian Water Use project in which the AID Director told us to make the project as large as possible. Our US Government wanted to make a "big splash" to reward the Egyptians for their recognition of Israel-Egyptian treaty just signed. So, I accepted the directive and enlarged the budget as much as I could.

In addition to the above, I drafted sections on Objectives, Strategy, Technology, Socioeconomic and Financial Analyses, Project Impact, Implementation, Risks, Sources of Finance, M&E, an Executive Summary, and a Bibliography–all in English. I knew someone would need to translate these sections into Spanish. Even so, I wrote them as carefully as if they were one of my regular consulting reports on which my stature as a professional would be judged by the quality of my writing. Then, I began to worry. Somewhere, I had read, but had forgotten, that my report must be written in Spanish. Enrique solved the problem by simply modifying this requirement so that it read *Spanish or English*. No sweat!

During these last three weeks work was the order of the day. I would wake up early, sometimes before sunrise, wrestling with some problem or planning the day's work. Sometimes I would work alone in the office till 8:00 p.m. Other times, when I thought I could get more done, I stayed at the Hostal. During these times Vicky and I would occasionally break for lunch at one of Vicky's favorite restaurants that served *mariscos* or for an evening meal at the *chifa*. Sometimes we would order from the limited snack menu at the Hostel, grab a hamburger from the Mom and Pop restaurant around the corner, or Vicky would bring in a sandwich and papaya juice for me. In spite of the pressure, Vicky and I sometimes would have a glass of Scotch before our evening meal. So, the pressure must not have been as high as it sometimes is.

I worked hard during the last ten days completing nearly all that I had committed myself to do. Down to the last week, Enrique called me at the Hostal one evening and laid out my schedule for the next eight days: Thursday, which was the next day I was to finish my estimate of the project's impact, Friday finish the section on practicality and risk, Saturday finish the section on finances, Sunday write on M&E, Monday do the Executive Summary, Tuesday write my End-of-Tour report, Wednesday prepare for our meeting with the Advisory Committee, Thursday work on revisions, and Friday copy my computer disks and tie up lose ends. Talk about a detailed schedule! But I had already written most of what he wanted, so felt I was in pretty good shape. Still, I wondered about my meeting with the Advisory Committee.

Sunday afternoon Gonzalo and his wife Elsa had us over for dinner. Gonzalo picked us up and drove us to his small home with its even smaller enclosed patio and the caged minah bird. We began with *ceviche* and *pisco sours* that I had learned to expect . . . and like. In deference to Elsa and their boys, ages ten and 12, Vicky and I tried our best to carry on the conversation in Spanish. The small home and patio did not surprise me because many Peruvian, Lostao, Ortega, and Lazarte excepted, live modestly. The combined salaries from the government, consultancies, and the universities do not allow otherwise.

Looking ahead to Wednesday's meeting with the Advisory Committee, I thought I might make the pitch that a project as ground-breaking as this one ought to strive to develop a "world class" group of conservation specialists. Their expertise and accomplishments should appeal to conservationists from other Andean countries, where conditions are similar. When the day arrived for our meeting Enrique and I went to the Ministry of Agriculture. It began with Enrique introducing me to the five members of the Committee. At that point I summarized what we had come up with. For some reason I felt my delivery in Spanish was awkward. My words weren't coming easily. Perhaps I hadn't spent enough time preparing, or it could be that I was talking to senior members of the Ministry. Enrique didn't seem to mind. He just sat back and listened. Then came their comments. Right off, one of them questioned the wisdom of sending the Peruvians abroad for PhDs. Too often they don't return, which I had to agree was too often true. Their other major concern surfaced when I listed a major risk was funding after the five-year support from the Japanese ended. I asked if they thought that the Ministry would then pick up the tab? I got a resounding NO! That stimulated another question, "In all my years as an international consultant, had I ever seen a conservation project as large as the one we were proposing?" This caught me off-guard because I thought the Japanese, the Bank, and the Ministry had all agreed to the size of our proposal. And hadn't a Committee member told Enrique to double the size of our proposed budget? Keeping this thought to myself. I had to admit that, "No, I had never seen a conservation project this large." But I pointed out that much attention around the world was currently being paid to resource conservation, and that soil erosion on Peru's western slopes was serious. I promised to look into this subject once I returned to the States. They said this would be helpful, since suggestions coming from me would carry more weight than what any of them might say. Finally, the question of farmer subsidies came up. Did I think the project should allow them? Yes, for on-farm conservation because the benefits are long-term and farmers give them low priority. Yet, they're in society's interest, which was the reason I had applied the low social discount rate. On the other hand the Government need not subsidize our suggestions for increased agricultural production. My analysis had shown these to be profitable from the farmers' point of view and I felt they ought to

willingly support them without subsidy other than supplying their labor without payment. These answers seemed to satisfy them and we parted on a cordial note.

After the meeting and as we were walking down the corridor of the Ministry we approached a dignified gentleman who looked familiar to me. Observing the attention I was paying to him, he stopped. It was Chang, one of the senior members of the Ministry whom I had met while working on Plan Meris. He had been a confident of Cornejo and Lostao. We traded pleasantries then moved on. Once out of the building Enrique told me that Chang was the author and instigator of Pronamaches. He also was responsible for FEAS⁶ whose purpose was to promote technology transfer to peasant communities in the Highlands. So, he had been a major force in improving the lot of the Andean peasantry. As we parted for the day Enrique said I needn't come to the office tomorrow. I thanked him saying I could get more work done that way.

⁶ The Spanish acronym is Proyecto de Fomento de la Transferencia de Tecnologia a las Comundades Campasinas de la Sierra, i.e., Development Project for the Transfer of Technology to Farming Communities of the Sierra.

The last day of our stay finally arrived. I had lain awake part of the night worrying about the meeting with the Advisory Committee and what still needed to be done. But as day broke my nerves calmed down. When I arrived at the office Enrique told me that he thought the meeting had gone well and that he could handle any follow-up that needed to be done. He said our report would omit reference about sending Peruvians abroad for their PhDs. He would just call this training abroad. And I told him I would contact the World Bank about their funding of large conservation programs. I turned over my latest corrections along with copies of my computer files. At noon, Enrique treated Vicky and me to lunch at one of the city's many fine restaurants. This one located in an eastern suburb that served Arequipa-style food. The restaurant had the usual ambiance of up-scale eating places—dark, rich paneling, professional waiters in white gloves, limited seating, and silver and crystal on white linen. Oh yes, our meal was delicious and Enrique was talkative as a good host ought to be. We had never been to his home, so this was our first chance to interact with him informally.

After dropped Vicky off at the Hostal so that she could finish packing and settle our account we returned to the office so I could say my "goodbyes." The taxi that management had order for us showed up on time and we arrived at the International airport for our flight to Miami by 7:30. But we had a long wait because the incoming flight could not fly over Ecuador due to the current border conflict. We didn't depart till 1:00 a.m. Our six-hour flight to Miami was routine. When the customs agent asked how much cash I was carrying I told him that I had a checks worth \$14,000, written by the UNDP. This is far more than is allowed. But after explaining the situation, he suggested that I endorse them for deposit only to my bank account in Fort Collins and saying a quirk in the law allows this.

The hotel where we had made prior reservations gave us a suite of rooms, at no extra cost, because that was all that was available. We thought this nice, until when checking out the next morning and found we were billed for two nights! The cashier said this was because we had

checked in early. We told him that we had never heard of such a thing causing Vicky's blood pressure to rise. She was able to negotiate half price for the "second night." After napping for a few hours, we thought we would have lunch at Joe's, Stone Crab, a popular spot on Miami Beach. When we got there the place was packed and the waiting time extending to mid-afternoon. So, we walked along the beach front, had conch soup at a small restaurant, then returned to Joe's by 6:00. The Maitre D' told use we would have a 90 minute wait, even though we were ahead of the crowd. I might have tried offering him a tip, but didn't.

Vicky and I were up and off to the airport before dawn. After we had checked in, cleared customs, and were waiting for our flight to be announced we observed a couple who had showed up at the last minute. The fellow looked to be in his 50s, she, a pretty one, must have been 30 years younger. We doubted that this was a honeymoon. What captured our attention was the look on her face when passport control asked for her passport. We heard her say that she must have left it in her apartment. The look she got from her "guy" was fierce. We left them standing there as we border our flight to Columbus Isle wondering how this would turn out. We landed at 8:30. Vicky had already made reservations for us to stay at the Club Med. Before long we had received the pleasant welcome that we have become accustomed at such resorts.

After settling in, we went to an auditorium for the orientation of a fairly large group of recent arrivals. We both signed up for scuba diving. Vicky said she wanted to give it another try. That meant the usual meeting with the Club's doctor. After lunch we gathered at the swimming pool to go through orientation once again. That included reacquainting ourselves with the gear, strapping on a tank with compressed air, submerging for several minutes where our instructor told us to remove our mask then put it back on again, then do the same with our regulator. It wasn't long before Vicky surfaced saying that she felt uncomfortable being under water like this. In a way this was strange because she could swim the length of a normal size swimming pool under water, as well as do the various underwater acrobatics. What cinched her decision to give it up was how difficult she found

it walking up the steps at the shallow end of the pool with the tank on her back. So that was it. She would snorkel, swim, and lie on the beach while I scuba dived. Meanwhile I was having my share of problems as well. I toppled over trying on my flippers then I couldn't inflate my vest by blowing into the small tube attached to it. Once in the water I couldn't keep my head above water when the vest was deflated. And I kept listing to one side. Eventually I realized that all four weights were on only one side of the vest. Dumb! Then I had a coughing fit. Other than that, I was getting along fine! Finally, I was able to stay below the surface and control my position by inhaling and exhaling. Luckily I passed then signed up for the refresher course the next day, followed by two dives a day for the next four days.

After breakfast the next morning a group of relatively inexperienced divers such as myself gathered at the dive master's office where we donned wet suits and checked out our tanks, vests, goggles, and flippers. Our boat had three guides who would each have three relatively inexperienced divers. As we rode out to our diving location I thought I would have no problem, since I was diving just two years ago. But this was not the case. First of all I had difficulty putting on my vest and strapping the tank to my back. Then, on my initial descent I went below the surface of the water only to pop back up under the boat. Without telling me Adam, one of the guides, slipped another weight in my vest and said, "Now, try it." That worked, but during the first 15' of my descent my ears were hurting. For the moment I had forgotten to equalize the pressure in my ears by pinching my nose and exhaling. With that the pain subsided and I slowly descended to the bottom where my group was waiting. Then Adam motioned for us to follow him. As we proceeded at an easy pace he pointed out the fish and coral around us. But I saw little. My tank and vest felt uncomfortable and I had trouble controlling my depth. Noting my problems Adam suggested I surface. Of the 12 in our boat, I was the second one up. I had too quickly used up the air in my tank because of my

⁷ As one gains experience it's possible to become certified at which point guides are not needed.

struggles and tenseness. When all three groups were onboard again, we headed for our next site. This gave me time to adjust my vest to make it feel more comfortable. But the waves were chopping, and before long our rough ride got to me. By the time we reached our next destination, I had heaved over the side twice, which helped. I was glad no one paid any attention to me. This second dive was better, although I still ill at ease.

The two dives the next day were an improvement over the first day. Even so, I felt my experiences here did not compare with those at the Maldives. The water was colder, the weather stormy, and our guides less attentive. On the first dive we followed our guide through narrow tunnels where I briefly hooked the tube connecting my mouthpiece to the regulator pulling it out of my mouth. Nothing bad resulted, but the experience left me nervous. When I surfaced after the second dive another diver came up to me saying that blood was flowing from my nose. I hadn't felt the wetness. Nothing serious. In fact, its common given the pressure. By the second night, I found myself dreading going out the next day, at which point I said to myself, "Why do I do this if I don't like going out?"

By the third day I had overcome these problems, regained my confidence, and enjoyed myself much as I had in the Maldives. Checking my gear back into the dive master's shop I tried signing up for the a night dive scheduled for the next day. But, I was three dives short of the required ten. Although my diving the first two days had given me problems, other aspects of our stay were fine. Vicky and I enjoyed the happy hours, the dinners that followed, and the entertainment. The Bahama lobster we had one evening was even more memorable. We met a diverse group of interesting people, many of whom came from the States, a few from Canada, and others from distant countries. The variety was impressive: a sanitary engineer, an orthopedic surgeon and his nurse wife, two MDs, a chemistry teacher with his wife who managed an insurance program, a Swiss couple and their diving-instructor son, a doctor from Kenya, a couple from Toronto with the wife being the

commissioner of police and their sun who talked about his jungle trip in Ecuador, a young Canadian woman who played competitive volleyball, an architect and his family from Canada, one of our diving instructors whose father worked for Texaco in Venezuela, a young man from Switzerland, and two elderly sisters from Oregon.

And, if the number of interesting people we met were not enough, once while on a dive a husky young man asked if I were from Fort Collins. When I said, Yes, he said that he graduated from CSU last year. As we talked, he said he was an offensive lineman on the football team and knew Wade Troxel. He said that he frequently talked with Lee Gray from Ag Econ, and had taken two courses from George Radosevich. So, we knew a lot of the same people. I told him that Gray had taught one of the sessions for my projects planning course; Radosevich and I were on a review team in Egypt; and Troxel was a fellow member of the ME Dept. Strange how frequently such things occur. But, not really. Warren Hall (at CSU) called this the *high probability of rare events*. The explanation being that the probability of the two of us with so much in common being on the same boat at Columbus Isle was indeed rare. But, the number of chances of *something as rare as this happening* is borderline infinite.

I had expected not to dive the last day due to nitrogen buildup in the blood, but was told that wouldn't apply because of our short, low-level flight to Miami. Still I decided to spend the day with Vicky. We arranged to go out on one of the diving boats and just snorkel. The captain assured us that he would find some spots where the fish were abundant and the coral close to the surface. The divers who accompanied us were certified and thus swim without a guide. Snorkeling, we saw swarms of fish and interesting coral, even a lobster partly hidden by a rock and an octopus swimming along the bottom. Of help to Vicky were the wide, submerged steps at the back of the boat so that she could get back onboard while being buoyed by the water, which was so much better than having to climb the iron ladder back into the boat as in the Maldives. In the afternoon, we continued

snorkeling along the shoreline. Finally, it was time to pack up, enjoy our last happy hour and dinner, and get ready for the flight to Miami the next morning. By midnight the next day we were back in Fort Collins having finished another interesting time abroad.

Almost immediately after our return I began searching my files and the literature for major conservation programs in the developing countries. Thirteen days after our return I wrote a long memo to Enrique that started out "Since returning I met with Ted Sheng, searched the literature at the CSU library, and reviewed over 30 documents on soil and water conservation. I found the literature broadly supports the value of soil and water conservation, especially concerning hillside agriculture. An article by Warford and Partow stated that the World Bank is now convinced that the pervasive nature of environmental problems dictates a new approach that integrates environmental management and economic policymaking at all levels of government. Also, I found nearly universal agreement that farmers ought to be given incentives for participating in conservation programs. I concluded that soil and water conservation, especially concerning small-scale, limited resource farmers, enjoys worldwide support, but that not all soils are worth saving. Consequently, I think the Government of Peru ought to continue searching for ways to fund the conservation program once Japanese funding ends.

Later, I talked with Ted Sheng who suggested I contact his friend, Tage Michaelsen at FAO in Rome. The fax I received from Tage contained the following: "The debate on funding for conservation programmes is as old as the programmes themselves, and about as unresolved. As a first approach it is often stated that conservation programmes and practices must be able to 'pay for themselves.' In the long run that should certainly be the case, but in the short run farmers and communities, such as in the Sierra of Peru, will need support to enable them to make investments in soil and water conservation. . . . Few countries have so far made serious attempts to create permanent, regular funding mechanisms for upland conservation. . . . Peru is presently engaging in the

formulation of a national plan for sustainable mountain development coordinated by the Executive Director of International Technical Cooperation, and long term financing for the alleviation of poverty and soil and water conservation programmes in the Sierra. Alternative sources of funding for upland conservation may come from [taxing] mining operations in the mountains, tourist fees, etc. . . . It is critically important for the sustainability of the Peruvian programme that the estimated \$100 million does not turn into an over-financed crash programme, but one which advances according to the absorptive capacity of the rural communities in the Sierra."

A few days later, I talked by phone with Carlos Emanuel of the World Bank, who, right off, said that he did not know how the conservation program could be funded after the Japanese funds ran out. He said the proposal [the one we came up with] was *a new idea as far as the Bank was concerned*! Carlos had been my follow-up contact at the Bank when I originally asked Enrique for a contact there.

Finally, on May 18 I phoned Patrice Harou at the Economic Development Institute. (The Institute provides training in development programs to mid-level professionals from the developing countries. I had been in occasional contact with it's director, Price Gittinger, about our mutual approach to project analysis.) When I asked how to cover the conservation program after the fifth year, he said, "No idea." Then I asked does EDI have training material on large-scale conservation of soil and water? He said the Institute has paid only minor attention to this subject. But, they are working on training material related to "green" issues, obviously including soil and water conservation. He went on to say that trying to spend \$100 million in five years is far too much. It would be better to put the money in trust and dish it out to NGOs, universities, and farmer cooperatives. It's better to start small, otherwise the program will collapse once the external funding stops. Finally, he thought it better to work on policy than on building walls.

At that point my contact with Enrique ended so I don't know how things turned out. But checking back, I found no reference to a large conservation program in Peru having been implemented. I didn't think about it at the time, but Japan's willingness to invests so much money on conservation in Peru, must have been influenced by then President Alberto Fujimori's connections with Japan. Whatever the case, the long-term outlook for the project we had worked so hard to develop looked doomed.

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Chapter 22: African Journey

In late April, '96 I received a call from Tom Remington, Senior Ag Advisor to CRS. His call did not surprise me, since David had already told me that when Tom learned about my involvement in FSR he showed immediate interest. We talked at length, about measuring impacts from ag investments, the topic of my dissertation, and my involvement in FSR. We talked about sustainable agriculture, small-scale irrigation, watershed conservation, and benefit-cost analysis. I promised to send him more information on what I had done. When Tom asked me to email him my salary requirements I was embarrassed to say I didn't have an email but would look into it. Turning to Ted Sheng for help and after some struggle I got that done. So, as with Wendell Gwinn and Word Processing and with Larry Nelson and spreadsheet analysis, this necessity led me to establish my email address.

Tom called four days later asking what I knew about data-based management. I said this wasn't my field, that my work on FSR did not rely on it nor did my work in benefit-cost analysis. Besides, I had learned about data overload, as with the example in Costa Rica in which so much effort had gone into gathering data, that the time and money to make use of the data had run out. Then Tom asked about the Statistical Package for the Social Sciences (SPSS). I said I knew about this, but not through having used it, that I thought this was primarily a tool for research and academics.

So that we could get to know each other and plan my assignment we agreed for him to come to Ft Collins for a few days. My assignment would be to backstop him in Addis on a one-week ag workshop for a small group of CRS's overseas employees, followed by two weeks in which I would evaluate CRS's soil conservation work in Ethiopia. This seemed right up my alley so I readily agreed. Besides, this would give Vicky and me a chance to revisit the country where we had spent so much enjoyable time.

It wasn't till mid-July that Tom was able to come here. He was a handsome man in his forties, trim, athletic, exuding confidence, and dedicated to his agronomic profession and CRS. During the three-month interval since his first contact, Tom had sent me loads of stuff on CRS, its programs, and the types of ag projects that Tom had been involved with. We put him up one of our bedrooms downstairs so that we could maximize our time together. We spent the better part of two days huddled downstairs planning my input to the workshop. Eventually we agreed that I should give six lectures during the week on project planning and analysis and M&E. Although Tom's initial interest arose from my FSR work, he decided to leave this out, since those attending the workshop were not involved with ag research. In discussing M&E I told Tom about my experience in evaluating *existing* M&E programs, but had never actually designed one, nor was I qualified as a statistician. The latter became relevant when I told him that I planned on relying on the Chi Square approach because I thought it suited the relatively simple tests I would be proposing. Tom, assuming incorrectly, that as a full professor I would not be challenged because those attending the training session would know much less about this subject than I.

During the two months before Tom arrived I made a quick review of CRS's activities in ag development, soil conservation, M&E, and food security. That out of the way, I selected six lecture topics: namely, Project Planning, B-C Analysis, Planning Irrigation Projects, M&E, Statistical Analyses, and Examples from Nepal, Pakistan, and Peru. For each of these I prepared a paper averaging 13 pages with illustrations and calculations. I planned on handing these out before my lectures so that each attendee would know the details of what I would be covering. I also prepared view graphs summarizing these topics.

On Tuesday, Sept 17th, Vicky and I landed at Addis' Bole Airport. Our last visit here had been five years earlier at the end of our time in Yemen. Tom and Tim Taylor, another CRS employee, had joined Vicky and me during our stopover in Frankfurt. The drive to the Imperial Hotel on the ring road near the airport did not take long. The hotel was modest, but nice enough, and clean. Tom directed us to the hotel's bar, which was little more than a small

opening under a staircase just off the lobby, where an attendant offered us beer or wine. The furniture was straight-back wooded chairs and card tables. Still, it proved to be a pleasant place to meet and relax. Dave Piraino, head of CRS's mission in Ethiopia welcomed us, although with reserve. By contrast Tony DiFilippo, his young deputy welcomed us with a big smile.

I adjusted to jet lag as best I could during Wednesday and Thursday while making last minute corrections to my upcoming lecture on Friday. Before I left, Tom had said that he would provide a printer so that I wouldn't need to bring mine. A mistake! When I tried to make the first print, I found that the operating program for the printer did not match that of my laptop. Tom and a CRS friend were able to solve the problem Wednesday evening—but not completely. I still had to hand-feed each page into the printer, instead of the usual way in which printers automatically produce page after page. Printing my transparencies was even more difficult. Still, by Thursday morning, I had the handouts for my first three lectures ready for my Friday lecture. All of this ate up time so that I often worked past midnight. This, the pressure I felt getting ready, and stomach cramps at 4:30 a.m. added to my unease.

The workshop began in a large conference room on the second/top floor of the hotel. The 30 attending were CRS's field personnel from Kenya, Gambia, Rwanda, Burkina Faso, Madagascar, Egypt, Calcutta, Lucknow, New Delhi, Mumbai, Guatemala Nicaragua, Bolivia, Haiti, and the Philippines, and four from CRS/Baltimore. One of the attendees, Nelson Cronyn, was a son-in-law of Jack Keller. Tom Remington, who had overall responsibility for the workshop, began by welcoming the participants and laying out the agenda, and introduced the few consultants who would be contributing. When Tom said that I was David's father-in-law several spoke out that "Anyone related to David has to be good!" That done, Tom spent the rest of the morning talking about CRS's international work in agriculture.

That afternoon I introduced myself by explaining that my field of expertise was economic development. I summarized some of the work I had done, listed the six topics I would cover during the week, then gave my Planning lecture. I needn't have worried about confining my

remarks to 90 minutes. With the questions that followed the session went on for 2-½ hrs. A good sign, I thought at the time. Taylor asked me to comment on the effect of "transfers" associated with food imports and the effect on producers and traders. I don't recall my answer, but I hope it went something like the following: *Transfers to economists occurs when benefits of some sort move from one entity to another without expending other than nominal resources.*Taxes paid to the government is an example. Distribution of welfare checks is another. With respect to Tim's question, I think he was referring to Food Aid flowing from the USA to Ethiopia in the form of a grant. The down side of this benevolence is the downward pressure on commodity prices by expanding the supply, which works to the disadvantage of local producers and traders. Given the importance of Food Aid to CRS's program of poverty relief, often in response to some catastrophe, I think Tim was searching for my thoughts on this topic.

Afterwards, Tom told me he was satisfied with the way the day went, but that he wished that Tim hadn't raised such a controversial question.

Up early Saturday morning I was able to get my last three lectures proofed, copied, and ready for distribution. Then Tom and I continued our presentations. I sailed through the Elements of Benefit-Cost Analysis beginning in the morning and finishing in the afternoon. After all, I had been teaching the subject seemingly forever. Later in the day T. J. Jose, from New Delhi knocked on my door wanting to know the meaning of some of the symbols I used in my NPW calculations. Taking advantage of his visit, I asked him about sample sizes for my upcoming lecture on statistics. He shocked me when he said he had a PhD in statistics, yet didn't know how to estimate sample size. So much for Remington's assurances that I needn't worry about my limited experience with statistics, because those attending would know less than I. Recall from an earlier chapter I wrote about the need for statistical advise from professionals when designing an M&E program. I knew about randomly selecting target areas and controls, questionnaire design, etc., but not the statistical part. Oh well, I'll just have to wait and see what happens.

Sunday was a field trip to Alem Gena, close by. We walked up the side of a mountain to observed small-scale, hillside farming then came back to the local brewery within a eucalyptus grove for sandwiches and beer. Then I split so that I could get ready for my next lecture.

My morning session on the application of the benefit-cost approach to small-scale irrigation in Peru went well enough, Then in the afternoon I came to my lecture on M&E concepts. I thought I was on solid ground based on my work with Norm Landgren in Pakistan, extensive reading on the subject, and my discussions with Casley at the World Bank. But I ran into trouble trying to explain and illustrate the chi-square test. I had chosen this statistic because of its simplicity, which I thought appropriate for those with little knowledge of statistics. Wrong! First of all, I got foxed up in trying to present the material, even though I had spent hours going over it attempting to make it as simple as I could. Then in the middle of my confusion the Indian with the PhD in statistics asked questions about the normality of the "population" being tested. As I weakly attempted to answer the question Tom answered for me. The next day, I convened a short session where I was able to clear up my muddled presentation of the day before, which went better. In the afternoon I summarized my experiences with M&E in Nepal, Pakistan, and Peru.

During the last two days of the workshop I was able to lean back and listen to the presentations of others. The five from India talked about their work in water conservation and the way they were able to gain farmer cooperation by guaranteeing no loss in yields from the changes they introduced. I thought about how FSR excludes guarantees in the on-farm trials because doing so shields the participating farmers from the risk of failure. But I remained silent. Nelson Cronyn from CRS/Ghana told about how Utah farmers irrigate successfully based on hand-me-down practices without knowledge of the underlying principles. When Jindra Cekan from Headquarters spoke about Food Security the attendees came to life. I was somewhat surprised, but perhaps I shouldn't have been since this is one of CRS's major focuses. Sharon D'Onofrio also from Headquarters described their Credit Training Program. While I found her

presentation well planned and orderly I wondered how much she really knew about credit. Hers was more about the need rather than how to provide it. She talked of the Grameen Bank's success in Bangladesh in lending to the poor, especially as concerns micro-lending to women. When she talked about the program being an economic success, I felt I had to say something. True, the success rate for loan repayment was truly impressive, something over 90 percent. But that's financial success, not economic success. I stressed that I thought the program was a huge success, in welfare terms in the way it helped women and promoted the entrepreneurial spirit. But it was not economic in that benefits exceed costs because, to my way of thinking, administering so many small and diverse loans has to be costly. And I speculated, though I didn't have proof, that these costs were not taken into account. Other than a few mean looks I got little response. Then, Sharon asked the group to "role play" by forming small groups, imagine themselves as small farmers, describe themselves, state their need for credit, and how they expected to repay their short-term loan. Excited by the idea, they immediately formed small groups. Listening to their solutions when time was up I thought some made sense while others revealed the need for training. Barbara Myers, a senior officer from Headquarters, closed out the workshop by speaking about CRS's current activities and where the organization was headed.

With the workshop over many of us headed downstairs for pizza and beer. Dave Piraino and Tony DiFilippo joined us there. After we had settled in, there was a stir. Looking up I saw a towering figure. The Ethiopians who are somewhat shorter than the average American were gazing in amazement. The figure turned out to be Manute Bol, who at 7'-7" was one of the tallest ever to play in the NBA. He had to dip his head just to enter our room. He is Sudanese who represents Ethiopian Airlines, which must explain his presence in Addis. Later, I pondered why Dave and Tony had taken so little part in the workshop.

The next morning Tom and I had breakfast together. I apologized about messing up my presentation on the chi square statistic. Tom brushed it off as nothing to worry about. But he went on to say that the major criticism from the attendees concerned the lecture format. The

attendees preferred a give-and-take exchange of ideas in which they could debate topics of their choice. Apparently, they felt they knew enough about the subject that transcended what I had to say. I doubted this, but what could I say? Years later, Tom approached me about other short-term assistance to CRS. So, I guess all was not lost.

The following day I sat in on a meeting chaired by Dave Piraino. Others attending were Tom, two from headquarters, two Ethiopians from the Addis office, and Kari Egge who was to be my counterpart on my next assignment. I was to find Kari a delight to work with. She was pretty, though not made up, and around thirty. Eventually Vicky and I learned that she exemplified the virtue of so many young CRS staff who had previously been with the Peace Corps. She had left the Philippines along with other Peace Corps workers due to threats on their lives ending up in the Congo where eventually she was evacuated to Ethiopia for the same reason. She hoped her next assignment would be in Haiti. I also heard DiFilippo say he wanted to go where the action was, as did others say. I thought what a courageous and admirable group of young men and women. Most of the lengthy meeting dealt with matters not concerning me. Eventually, Dave said that he wanted me to look at their program in agriculture and soil and water conservation including how this relates to health, food security, food for work, and Kari's work in M&E.

Over the next two days I worked closely with Kari on what we should try to accomplish during the rest of my time in Ethiopia. CRS had hired her as a consultant for a year to work in Addis on data gathering and analyses related to agriculture and public health, for which she was qualified. But not in M&E. Nor were those with the AID Mission. During the meeting with Piraino I had asked if he were committed to M&E to which he responded, "Yes, if that's what the AID Mission wants then I concur." Shocking. Here, he was concurring with something he knew nothing about. Poor Kari was caught in the middle. She was expected to help CRS/AA apply the approach to AID's Development Activity Proposals (DAPs). And, it seemed that Remington was as much in the dark as everyone else at CRS.

Kari began helping with the baseline surveys that CRS had already started. She said that these were to be the starting points for implementing the M&E approach. She showed me the forms that she had been working with. I was aghast at the number and diversity of the questions. The example she showed me was thirteen pages long. It began with general questions about location by elevation and climate by temperature and rainfall, household population by gender and age, then moved on to agriculture of the area by crops, irrigated and dryland, grazing areas, yields of major crops for the past six years, most important cash crops, why yields had increased or decreased, home consumption and sales by crop . . . then into 15 activities by crop, man-days and oxen-days . . . agricultural inputs, livestock inventory . . . food availability . . . marketing and credit . . . soil conservation by type of land use and topography . . . plant nurseries by number, activity, and location, and ending with water development for household and livestock use, types of containers villagers use to carry water. Another questionnaire contained the same general information before turning to basic questions about hydrology, topography, soils, soil and water conservation, afforestation, rainfall, temperature, land use, agriculture and farming systems, crop and livestock production, and an enumeration of on-going and phased-out projects. This audacious attempt at data gathering reminded me of Costa Rica. AID was still making the same mistakes, despite its required section on "Lessons Learned."

In my final report I summarized the steps I thought essential to an effective M&E program based on Landgren's and my experience in Pakistan. These steps included identifying target farmers, stratifying them into groups of commonality, selecting "controls," determining sample size, designing the questionnaire, deciding on frequency and location of measurements, and evaluating the results. I doubted that Kari, CRS, or AID would ever implement such a program. But at least I had advised them on what M&E was all about as well as building a case against gathering so much baseline data.

By the second day, Kari and I began talking about the trip to Weliso in the heartland of Gurageland 110 km SW of Addis. We would use the DAP that the Archdiocese in cooperation

with CRS/AA had prepared and was now implementing. The focus was on increasing agricultural output and conserving soil and water. In cropping they proposed increasing yields by using composts and fertilizers; they also proposed providing nurseries for plants and seeds, communal forests, and livestock watering ponds. They focused on increasing yields of maize, sorghum, barley, teff, wheat, and potatoes by ten percent the first year then increasing this by five percent annually over the next ten years. In conservation they were to implement check dams, grass strips, bunds and slow-forming terraces, as well as build stone terraces, plant of eucalyptus and cypress trees in gullies to rehabilitate them while also producing lumber and poles. In welfare, CRS activities included a Mother-Child-Health program, Food for Work, a Famine Early Warning System, food grain self-sufficiency, nutrition management, crop diversification, expanded irrigation, composting for household gardens, T&V (training and visitation) in extension, development of wells and ponds as sources of potable water, community development, and child survival support.

Of course, just listing these activities in this way is an exaggeration. But the DAP *did contain* comments about all of these activities and objectives. The problem is that I found little focus on what was *paramount*, nor the connection among these objectives, nor the strategical sequence—other than the following. CRS/AA wished to take advantage of their emergency relief work and the social issues related to mother and child health. From there CRS could begin making more fundamental improvements to "welfare" in terms of short-term increases in agricultural output (and family income) and long-term concern for the environment (namely, soil and water conservation). While CRS is an accomplish entity in providing emergency relief, becoming a development agency is more complex.

On the third day Kari, her team of Ethiopians, and I departed for Gurageland, which was 300 meters lower than Addis. As salaried professionals Ato Kibru, specialized in farming systems and land use, Ato Moges, specialized in soils, and Ato Messele, specialized in agronomy. Once outside the city limits the two-lane paved highway was lightly traveled. Our destination was the small town of Woliso, also known as Ghion. About halfway there we

stopped for breakfast. This sounds ordinary, except it wasn't for the interior of Ethiopia. After checking into a nice, but modest motel we drove to the Archdiocese. Making our way to the main office I marveled at this oasis of well-kept grounds and buildings, including the chapel set amidst tall eucalyptus and cedar. Ato Tesfaye, the coordinator for CRS's activities in the region, welcomed us. He had called together members of his development team: Ato Yohannes, responsible for the Food For Work program, Ato Berhanu, agricultural engineer and coordinator for two *woredas* (a third-level administrative division), Ato Kinfe, coordinator for two other woredas, and Sister Workuha, coordinator for the Mother-Child-Health program mother. We spent the rest of the day learning about their programs.

For the next two days day the Hararghe team showed us their more important accomplishments, which included watering ponds, spring systems for potable water and irrigation, and conservation measures. The latter included check dams within the ditches bordering gravel roads, grass strips and trees planted to help resuscitate major gullies, and interceptor ditches. One of our stops was at a clinic, whose primary purpose was to treat and provide information to women about family health and nutrition. Taking advantage of the popularity of these clinics, agriculturalists also had demonstrated mulch pits, which they hoped women would use as a soil condition for their family gardens. That hope frequently was not realized because the male heads of household often used the mulch on their ensete groves.

At one point we stopped at a hilltop where we had a clear view of the farm land and forest groves spread out below us. With the big rains ending a week ago the weather had turned incredibly nice: sunshine, calm, with a touch of moisture in the air, temperature around 72°, and green all around us. The ground had dried out just enough that plowing had begun; farmers were in their fields with wooden plows drawn by a single or a pair of oxen, women were planting seed, and others were clearing the land. Famine does plague the country occasionally, but with the view before us, that was hard to believe. Moreover, it is possible that this highland area seldom experienced drought as do the areas to the north and east.

One day when we were far from the main loads we stopped for lunch at a large *tukul*. Pickups and jeeps were parked outside, so we figured this must be a good place to eat. Although it was light outside, the interior was dark, smoky, and crowded with small groups of men seated around trays of *enjera and wat*, the traditional food sometimes eaten three times a day. In time our my eyes grew accustomed to the darkness so that I could see what I was eating. The food was similar to what Vicky and I had enjoyed in Addis.

On the fourth day during our short, wrap-up meeting with the head of the Secretariate, he reminded us that theirs is a religious organization, not an NGO. That took us back a bit. But then why not? Then, we headed back to Addis. I spent the next couple of days summarizing our visit, trading ideas with Kari and her Ethiopian team, and planning our trip to Dire Dawa. The four were well-educated and experienced. Together, they had relevant experience in agronomy, animal husbandry, the Universal Soil Loss equation, irrigation, and water delivery, storage, and T&V-all relevant to most of the development and conservation activities CRS was supporting. The agronomist knew about FSR, but had not been involved in its application. And none really understood the complexities of M&E. Although, Kibru had written a report on agricultural credit. When he told Piraino that he knew little about such credit he was told to write about it anyway!

Kari, Vicky, and I flew to Dire Dawa about 500 km east of Addis while Moges and Kibru took the Land Rover that we would use while there. At a quarter of a million inhabitants, Dire Dawa was one of the largest city in Ethiopia, although much smaller than Addis. By being in the Rift Valley its elevation is still 1,700 m; the escarpment is just to the south. It is a major stopping point on the railroad connecting Addis with Djibouti.

Our rendevous was at a small hotel where we would staying for three nights. It was located in a residential area with its entrance directly off a tree-shaded street. Vicky and I remained in the Land Rover while waiting for Kari to check us in. We soon attracted a small group of young Ethiopians wanting to know what we were doing here. One of the older ones in

good English asked us if we were Germans. Once we were inside we understood why he had asked because a German family was already staying at the hotel—father, mother, and a pretty teen-age girl. The brief shorts and lose-fitting tank top that she wore undoubtedly had caught their attention. Strange that the parents would allow their daughter to run around in clothes like this, given that the family had lived in Ethiopia for years. More ominous, we were to learn that a young German reporter, who had spent several weeks in the area, had been murdered just three days ago. As a result the hotel proprietor said the city was under curfew and that we were not to leave the hotel after sunset. She said the problem stemmed from the country's on-going conflict with the Somalia Muslims less than 150 km away. Although Vicky and I sensed the danger, Kari and our two Ethiopian companions did not seem to be bothered.

After lunch we drove to the Harage Catholic Secretariate where we met Aba Tesfaye, CRS's chief contact, and Ato Zemedie Abebe, a social worker whose focus is Community Development. Tesfaye explained how the Secretariate made its entry among the farmers, beginning with hunger relief, followed by the Food for Work Program, then to social welfare activities such as the Mother-Child-Health program, and eventually promotion of Peasant Village Associations. These Associations played an important role in what they hoped to do via CRS funding for technical assistance in agriculture and conservation. They have good relations with the nearby Alamayu Ag College, but not the national Ag Research program or the Extension Service. He explained that the forest groves and conservation structures that resulted from forced labor by the Mengistu regime had not set well with the locals. Our meeting lasted nearly three hours.

The next morning we arose early to drive to Harar some 50 km away where Abebe showed us some of the activities we had talked about yesterday--the conservation bunds, the watering ponds, an experiment with improved maize and sorghum varieties, and gully protection. At one location the locals showed us a gully that sometimes runs full with water and be diverted onto the bordering fields, called spate irrigation. Otherwise what I saw was much like what I saw during our previous trip: bunds intended to control sheet erosion, measures for controlling gully erosion, hillside terraces, springs developed for irrigation, watering ponds, storage

reservoirs, and communal forests. At one of these sites well off the main road, I attempted to cross a narrow stream on a small log. Midway across I lost my footing and fell back-down some two meters below into the shallow, muddy stream. Luckily, I managed to hold my camera above my head thereby keeping it dry.

It was late when we finally checked into a rustic motel on the outskirts of Harar. The Ethiopians, who stayed with us, advised that rates charged us as foreigners would be twice that charged Ethiopians partly because we expected hot water. Big deal since our room cost us the equivalent of \$12. Our room was clean and the bed okay, but Vicky and I had to share just one thin towel, the small amount of toilet paper provided us was a joke. But then this region is largely Muslim, so that wouldn't bother them. The restaurant, such as it was, had already closed. But our Ethiopian crew talked management into serving us. It wasn't much and we ate in dim light. Still, we left with something in our stomachs. After we had eaten some of us sat on the veranda outside the restaurant where some had coffee, some had beer, and others just smoked.

We were not there long before two young men, perhaps in their twenties, approached us from the parking lot. They said they wondered what brought us to Harar. Apparently, a group such as ours staying where we did was uncommon. The Ethiopians explained that we were from CRS in Addis and were working with the Hararge Catholic Secretariat whereupon they said they were relief workers headquartered in Jigjiga, a village nearby, and had much in common with our work. So they sat down with us and ordered a beer. Before long Kari and the Ethiopians of our team left for their rooms. It had been a long day. That left just Vicky and me. I told them that we had lived in Addis for over five years where I worked with the Planning Commission. I wasn't sure if this impressed them because Haile Selassie had been in power then. After awhile they ordered a second beer including one for me, which I felt obliged to accept. Vicky gave me a heads up then went to our room. At that point there were just the three of us and I begun to wonder if I was making a mistake, given the prevalence of Somalis in the area and the recent killing of the German. Eventually, we were talked out and I returned to

my room. The next morning, Kari told me that the Ethiopians with us said that I had taken a chance in what I had done.

After a breakfast that wasn't much better than yesterday's evening meal we continued to visit some of the sites Abebe wanted to show us: a communal forest, a stock watering pond carved out of stone, gully reclamation, improvement to a spring used for drinking water, earthen bunds, and terracing. Nothing new, just examples of what the Secretariat was doing.

By now, we had seen enough and turned our attention to Harar. Smaller than Dire Dawa, the city is a major tourist site for those interested in Ethiopian history. Established in the tenth century, it had been one of the country's major trading centers. Today a large percentage of the population adheres to the Muslim faith and is on UNESCO'S World Heritage List with its 82 mosques and over 100 shrines. It is considered to be the fourth holiest city of Islam. The small downtown area with its historic buildings, wooden balconies, cobblestone streets, boutiques, and coffee shops is a tourist's delight. Our group strolled the streets, stopped for snacks, browsed the shops, and eventually located an old Catholic church. The pastor there was more than willing to show us around and relate its long history, which we found interesting given its location within this Muslim community. As darkness set in some of us thought of watching the famous "hyena-man" feed these animals at a spot on the outskirts of town. But that would have meant staying late so we decided against it. Instead, Abebe took us to the dining room of a local hotel that didn't cater to tourists. The proprietor directed us into a large, dimly-lit dining room with lots of tables but few diners. About midway through our meal, all of the lights went out. After awhile, waiters brought out candles so that we could finish eating. Vicky, Kari, and I looked at each other as we noted that the Ethiopians in our party seemed nervous. When we asked what was going on we were told that there had been unrest in the area leaving us to wonder if this was part of it, or simply a power failure.

Still in the dark we paid up and headed back to Dire Dawa arriving about an hour later.

As we entered our hotel we sensed the tension. Having arrived shortly before us a second

German family was describing to the group gathered around them what they had experienced. The teenager of the family was even whiter than her normally light skin. They *had gone* to see the Hyena Man along with other tourists. About midway through the feeding, the place went dark, they heard shots from what sounded like Kalashnikovs, and they all ducked for cover. Later, after the turmoil had died down they talked with two German hikers who said that two bullets had been embedded in their backpacks. Except for that they probably would have been killed. The father of the family said they were leaving Dire Dawa on the first plane out. The lady of another German couple whose husband was a consultant in Tanzania told of hearing bullets whiz over their heads as they huddled on the ground. Kari, who had seen her share of turmoil, told us that she would not change our plans for the next two days.

Joining us the next day Tesfaye said he had a few more sites to show us. So we visited more springs, hillside terraces, a reservoir funded by the Lutherans, and micro-basins, which we had not seen before but were little more than semi-circular excavations around the bases of individual trees. We were back in Dire Dawa in time for lunch. This time we went to what looked like a private residence. The place was clean, neat, and crowed with Ethiopians. We wound our way past the small tables through a doorway with more tables and eaters to reach a small sink set against the back wall. Vicky and I watched as the Ethiopians with us roll up their sleeves then thoroughly wash their hands and lower arms. From this Vicky and I knew that we were about to be treated to *enjera and wat*. Thankfully, we had separated ourselves from the tourist crowd and had returned to the Ethiopian culture we liked.

After a short rest, we rode to what I had known as the Alemaya Agricultural College, now called Haramaya University. The College was established in 1954 with funding from Harry Truman's Point Four program, predecessor to today's USAID program. Faculty from Oklahoma State Univ helped get it going. When I had worked with the Tech Agency, Clancy Miller being the ag economist that he was, had traveled to this place to establish contact with some of the expatriate faculty he knew there. I hadn't gone with him, but I too knew of at least two who had tours of duty there. Clyma had taught and done research there on a two-year contract before

joining CSU; and Gene Quenemoen who I had met in Cairo. I was glad to have finally had a chance to see the place. We entered through an a iron gate and drove several kilometers past experimental plots, sweeps of grassed areas intermingled with tall eucalyptus, and past dormitories, and equipment sheds to a paved area that was the hub of the University. In talking with several of the professors I was interested in the extent to which they taught benefit-cost analysis and FSR. I was not surprised when they said they did on both counts, and pleased when they said they were using the Guidelines.

We arrived at the airport at 8:30 for a 10:30 departure, which I thought strange given that this was a domestic flight. While waiting, I struck up a conversation with an Irish Brother who said he had spent many years in Ethiopia supporting the Catholic church. This was my first exposure to the order. I was impressed by his devotion, modesty, and dedication to helping those in need. When it came time to clear airport control we expected all to be in order. But Kari's passport, for some reason, lacked the necessary stamps so that she was not given clearance to leave. Rather then being upset over this turn of events, she calmly said that she would just ride back with Moges and Kibru in the Land Rover. Instead of reaching Addis Ababa within an hour or so, she would have eight hours of a tough journey ahead of her. No fuss, no frowns, no aspersions to whomever was responsible. What a trouper! However, just before the plane was to leave one of the expatriates who knew how the system works made it possible for her to join Vicky and me on the plane.

Over my last week in Addis I conferred with Kari about what I should include in my final report. I referred her to Casley & Lury about "quasi" experimental designs, as a way to greatly simplify the approach to M&E. We talked about measuring improvements to crop yields and judging the benefits of composting and gully improvements. She confided that she felt vulnerable in her work because of her lack of experience and I did what I could to convince her that she was smart and plenty capable, besides neither the Ethiopians nor AID personnel could challenger her. During these last few days both Vicky and I grew quite fond of this PhD candidate at Tulane Univ with so much talent, experience, and daring. I also exchanged ideas

with Kibru, Moges, Messele, and Amselu over their work. But most of the time I sequestered myself writing my final report. In it I described and commented on what I had seen, divided the investments into short-term, directly productive activities, such as fertilizer use and improved sorghum varieties, medium-to-long-term directly productive activities, such as communal forests and nurseries for producing seedlings, and indirectly productive activities, such as composting, and soil conservation. I went on to say that I found CRS's reliance on the local Catholic organizations as having "staying power," as compared with the short-term activities of consultants who spend only a few months then leave. But in the end I thought that CRS was spreading itself too thinly by trying to do too much: food handouts, early-warning famine prediction, women's health, community development, ag research and extension, and soil and water conservation. While these are all worthy activities there are just too many of them.

Better to focus on what CRS does best, namely emergency relief. I also felt that relying on AID for direction, especially concerning M&E, was a mistake given the collection of an excessive amount of information without a clear purpose for its use.

Apparently uninterested, Piraino hadn't arranged for my debriefing. In fact, he had scheduled a vacation to coincide with the time I was due to finish my report. So, I left my report with Kari asking her to look it over and if she found anything terribly wrong go ahead and change it. The last evening Kari invited Vicky and me to Castelle's happy to know that this excellent restaurant was still going strong.

Before we left for Ethiopia, Vicky had organized a month-long trip that, except for Swaziland, were parts of Africa we had not seen before. Our flight on EAL to Nairobi did not take long. Once there we took a taxi to the suburban home of Herb and Pixie. Herb was gone but Pixie was there. We visited for awhile then she took us to a popular open-air restaurant in a

garden setting, called the Carnivore. True to its name, we were served a sampling of all sorts of wild game, including kudu, zebra, alligator, and python. Exotic? Yes, intended to appeal to tourists unfamiliar with Africa. As we ate Pixie explained the arrangements she had made for us: a driver to take us to the Tanzanian border where, after passing through customs, a Tanzania taxi would drive us to Arusha where we had reservations at Novotel, a large international chain. The hotel was nice enough, clean, and comfortable, but not luxury, which suited us. That Arusha had an abundance of good hotels did not surprise us given that this is the defacto capital of the East African Community. There, we would hook up with Leopard Tours for the rest of our time in Tanzania.

Our driver Elias who would be with us the next five days arrived early the next day. His name, suggested he was Christian. He was polite, slightly over weight, somewhat darker than many East Africans, and proved to be a careful and informative driver. As we left the paved area outside the city limits our road became dusty and rutted. We wondered if this was what it was going to be like for the rest of our journey. But we soon hooked up to the national highway A104, which was a well maintained asphaltic roads for most of our trip. After some 30 mile we turned onto B142 headed northwest, and before we knew it we were at the Lake Manyara National Park. We had wanted to see this place because of the pictures we had seen of lions After seeing a couple of them, we drove on, eventually reaching B144. lying in the trees. From there it was a long hard drive through dry scrub land. We saw few animals other than a mother cheetah and her cubs lying under a shady clump of small trees and an occasional jackal, wild dog, and hyena. Vicky with her keen eyes was to prove as adept as our driver in spotting birds and animals. Around 3:30 we reached the Serengeti National Park and before long we spotted a sign leading to the Serengeti Sopa Lodge. As we wound our way to the top of a rise we noted off in the distance a lone lion walking in the tall grass, several Thompson and Grants gazelles, impala, bushbuck, and a dik-dik. Even here we were not in the deep forest one thinks

¹ Checking the map I noted that the main roads were marked with an A, B for the next tier, and dotted lines for what must be trails.

about as being Africa, but mostly grassland, bushes, and small trees. The lodge was four-star plus, with a breathtaking view of the terrain we had just passed through.

The next day we took our time over breakfast then Elias drove us around the National Park. Somehow I thought we might start out early to catch the animals in the cool of the morning. When I quizzed Elias about this, he nonchalantly told us that we would be seeing plenty of animals and species of birds, which was true. Outstanding was a pride of lions (three males, two females, and 11 cubs) lying in the shade of some small bushes. Later, Vicky and I had a beer by the pool-side and I, for the second day, braved the pool's chilly water.

We departed the next day and headed for Ngorongoro Crater, one of the "must see" spots when game viewing in Tanzania. The crater is *huge*, nearly a km deep and seven km across, so our guidebook said. Only a few of the country's wild animals are not there, the giraffe being one of the species, which means the Big Five (lion, elephants, Cape Buffalo, leopard, and rhinoceros) were there, the Maasi as well. We checked into the another beautiful lodge with its oak paneled great room, vaulted circular thatch ceiling, artifacts that highlight the African motif, and individual huts with ochre painted interiors and plank walkways set among small, dark-leaved trees and shrub. Stepping out onto the railing next to the main area we had the broad expanse of the crater below us, feeling as though we were in the clouds. Explaining that only Park drivers were allowed to go down into the crater, Elias arranged one for us. After a few hours touring there we returned to the Lodge. Before dinner I took a quick dip into the coldest water since Tahoe and Fallen Leaf Lake. Using this as a comparison, its temperature could have around 60°. As with our other stays at first-rate lodges in Africa we enjoyed self-served coffee and brandy in a separate room where, as is our custom, we struck up conversations with other guests. One of these, to our surprise had graduated from CSU and was headed for Durban as part of a training program for black South Africans.

The next day we decided to spend it in the crater, rather than take the balloon ride over the crater that Elias told us was available; and we were glad of our choice. We saw herds of elephants, Cape buffalo, and rhinoceros, and a solitary lion. While seeing these is always exciting, we had seen them before; and the limited number of gazelle, impala, kudu, and zebra did not match what we had seen at other game parks. Even so, it was an interesting day.

As we passed Lake Manyara on our way back to Arusha Elias suggested that we might like to spend that night at the Tarangire National Park. We hadn't heard about this one but thought it might be worthwhile. To get there we rode past Lake Manyara again to the junction with A104. Instead of turning left to Arusha we turned right and we were soon at the Tarangire Safari Lodge. Although the Lodge's reception and sitting area looked somewhat like the others where we had stayed, its lofted ceiling, stone walls, and artifacts appealed to us. After registering, we had lunch, rested, took a dip in the pool, and headed out to see more "game." Then it was back to the lodge where, going along with the British, Vicky and I had a gin and tonic before dinner, then off to bed.

As we headed out the park the next day we told Elias that we still hoped to see a leopard before ending our trip. And sure enough on our way out of the park he pointed one out to us. It was on a limb about 10 meters up munching on what had to have been a recent kill. We urged him to drive closer, which he grudgingly did. Apparently he was anxious to get back to Arusha. Even so, we were happy to have seen the fifth of the big five. About halfway to Arusha Elias stopped at a spot called the African Heritage, which looked like a tourist trap. Obliging Vicky and I walked inside, gave the place a quick glance around, and walked back outside without buying anything, nor even examining anything. Vicky and I had spent enough time in Africa to have bought just about all of the trinkets we wanted, including some we didn't need.

Once back at the Novotel Hotel in Arusha we ran into a bit of trouble. It began with the agent for Leopard Tours. He told us we owed \$255 more than we had paid because of our stops at Ngorongoro and Tarangire. Okay on the Tarangire, but not on Ngorongoro which had been included in our package. I let Vicky fight this out since she had made the arrangements. She finally settled by paying \$150. But now we were beginning to run out of cash and we had yet to

tip Elias. Following our guide book we knew the custom was to give three dollars per person per day. That would come to \$30. But there had been only two of us--not our choice, but welcome none the less. And we figured that if there had been four, or even five of us he might be entitled to \$60 or \$70. Even this seemed a small amount, and, after all, he had served us well, so we went "over the top" by giving him \$120. Because we were about out of cash, Vicky tried replenishing our supply by using a credit card at the Novotel. No soap. He told us to go to the Government's Bureau of Exchange. The problem there was their 35 percent charge. To get \$150 we would have to pay them \$203, which was a no-starter. So, instead of cash we wrote Elias a check. Within minutes he returned saying it would cost him \$7.50 to cash it implying he wanted us to cover that amount as well. We refused on the grounds that we had been more than generous with what we had given him. So, he departed looking sad, but inwardly he must have been more than satisfied with what we gave him. In our travels we have learned, correctly I think, that we as Americans are much larger tippers than most others.

Before long the driver we had arranged to drive us to the Kenyan border arrived, getting us there in 2.5 hours. Three hours later we were in Nairobi. Once there we asked him to drive us directly to Herb's and Pixie's house. His radio contact said he should charge for the extra distance. So, we told him to just take us to the Intercontinental downtown. Instead, without saying another word he drove us to the address we had given him. Grateful for his extra effort we tipped him \$20, which seemed to make him happy. By the time we got inside the house Vicky had a headache, slight fever, and the onset of diarrhea.

The next morning Herb, Pixie, and I played a round of golf at the Sigona Club about 20 km away. Vicky stayed "at home" recovering. For those who don't know much about golf in Nairobi, there are many fine golf courses, a legacy of Britain's colonization coupled with the lush, tropical setting and mild climate. This par 72 course had lush green grass, a mixture of flat and rolling hills, and many large oaks. I started out both rusty and with borrowed clubs, but recovered, shooting 47, 41. Pix impressed me by shooting 78; Herb shot 90. The next morning Herb took us to the USAID building, a large seven story affair, in the middle of town so that I

could write a check to replenish our cash supply. That done, he drove us to the International Airport east of downtown. After a 2.5 hour flight we were in Harare where a representative of the Meikles Hotel, one of Zimbabwe's premier hotels, met us. Once settled, we phoned Francis Podmore, brother of Terry, to let him know we were in town and hoped to get together after our trip to Lake Victoria. Then I walked over to the central park not far from the hotel where I saw native Africans with their wares spread out on the edge of the sidewalk. From there I walked towards the center of this city. Nothing special to report here other than this modern city of over two million people looked much like a US city. I stayed to the edge of the downtown area and continued past small businesses and through a residential area. I felt neither conspicuous nor worried by those I met.

The next morning we flew to Victoria Falls, landing on the Zimbabwe side. It felt hot, although the temperature was in the mid-80s. We checked into the Elephant Hills Hotel, which was another lovely place. So far Vicky and I had been living in style, without running up a big expense because the prices at these places were modest. The hotel had two wings, one five and six stories high. The swimming pool, which contained a small waterfall, wound around the base of the hotel. Beyond the pool was an 18-hole golf course bordered on the far side by the jungle with a river. Walking around the course I found it dry and uninteresting. The pool looked enticing given the warm weather, but that could wait. In the afternoon we took a 90-minute cruse on the Zambezi River with 50 others. As we slowly drifted downstream with the engines shut down we scanned the banks for wildlife. All the while some passengers drinks in-hand strolled up and down the length of the boat while others leaned over the rails observing the crocodiles resting on the bank's edge with hippos, elephants, and smaller animals coming to the river to drink. Vicky and I just sat enjoying the trip and the canned music. Given the setting, our boat, and the river we might have been on the "African Queen." We sat next to a talkative Englishman and two white Zambians who said they worked with an adventure outfit named Clearwater. Eventually, the captain engaged the engine and we headed back upstream. Although the two Zambians drank beer from start to finish they walked down the gangplank as

sure-footed as ever. That evening we watched the night show featuring lots of African dancers decked out in local costumes jumping around and jabbing their spears at make-believe targets.

The next day we arranged for a guide to take us along the path at the edge of a vertical cliff with the river gorge some 100 meters below us. We stopped at the point closest to the Falls less than a km away. Even though we were not there during high flows the view was breathtaking with the mist from the water hitting the rocks coming up the face of the falls and into the air above us. After awhile we continued along the path till we came to a small structure that was a platform where bungee jumpers make their leap. Just the thought of doing this made my head dizzy. From there our guide drove us to a traditional village with various huts that illustrate the life style of native groups. After a lunch at the pool-side bar we visited a crocodile farm. Our guide was courteous and informative and invited us to a cup of tea. We had dinner on the terrace overlooking the golf course below us. It had been a full and enjoyable day.

The following morning we arranged for a taxi to drive us the short distance across the border to Botswana and checked into the Mowana Lodge. Passing through customs was a breeze. Not quite the elegance of the last two hotels where we had stayed, but every bit as attractive and interesting to us. Perhaps more so with its game-park motif. After depositing our suitcases in our room we returned to the tour desk in the lobby and selected two events each for the next two days. The alternatives were two game drives, a river cruise, and two horseback events. Vicky rejected the latter out of hand.

This mid-day drive turned out to be *exciting!* We rode with a British couple and four Americans, all of us with African experience. One of the Americans was brought up in Zaire, the Brit was born here, and the Americans were with the Embassy in Gaborone. Soon Johnston, our guide, arrived. He was lean, possibly in his 20s, who looked and acted European. Our landrover had three tiers of seats. Vicky sat with the driver and Johnston in the front. Three were in the middle tier, and I sat between two middle-aged ladies in back. The second and third tiers was raised allowing its occupants to see over those in front.

We headed out on the main track of Chobe National Park, noted for its large herds of elephants. Coming to a rise, Johnston told the driver to turn off the road and head across the grassland. There, about 200 meters ahead of us was a herd of some 30 elephants moving together at a slow pace. As we drew near, the driver slowed because he saw that the bull among the cows and calves was in musth. As we drew nearer we could see the dark tar-like secretion streaming down the sides of his head at a spot midway between its eyes and ears as well as detecting its strong smell and seeing that he was dribbling urine. This was definitely an elephant looking to mate. . . an aggressive, as we were soon to find out. Following directions, our driver slowly entered the herd, which agitated the bull. He circled our Land Rover flapping his ears. So we drove off. After we were well clear of the herd, Johnston told the driver to go back. And to our dismay he again penetrated the herd. By now the bull was stomping his feet and flapping his ears even more. Then, up went his trunk, out came a shrill bellow, and he charged us head on going for the front of our vehicle! The lady to my right threw up her arms, screamed, and practically jumped into my lap. The picture I snapped at this critical moment shows nothing besides the elephants large head, tusks, and ears. To our great relief, the bull stopped a foot from the front of our vehicle. I don't recall what Johnston had to say about all this, but I think he was surprised. And he should have been because bull elephants in musth have been known to kill other elephants, and sometimes humans. That was enough for our first "safari" so we headed back to our hotel. During our trip we had seen a group of lions, one of the lionesses must have been in a fight because it limped on a wounded paw, the tip of its tail dangling in the dust. Among the animals we had seen a sable gazelle, kudu, and baboons, as well as fish eagles. Not knowing if Johnston was to be our guide that evening, or the next day, I told him I thought he had done a great job tipping him to show my satisfaction.

Now we were free until our night trip, which would begin at 7:00. So, we had lunch, rested, then went for a swim in the pool. Sitting in a recliner to dry off, I casually looked around and to my surprise, I spotted a lone lion resting on a rock outcrop no more than 100 meters away. I pointed this out to our waiter, who passed it off as normal. Made me wonder if this was a

"resident" lion known to occupy this spot I was left wondering what would have happened should the lion chose to stalk one of us at the pool.

Vicky and I were up early ready for our next ride through the park. We had been told that this is the time when the park comes alive because most of the animals are active while the day is still cool. Johnston showed up as our guide, which was not a complete surprise. Somewhere I had heard that guides have enough flexibility to show up where they have been appreciated. That wasn't the reason for my generosity yesterday and that may not have been why Johnston was to be our guide today. Whatever the reason, here he was.

As we entered the Park again, we went off in a different direction from the one we took yesterday. Our experiences were to be different and less exciting in the morning. We saw two lionesses on the hunt, tracking a wart hog. Then, as we continued driving slowly down a narrow dirt road we saw a couple of lionesses ahead of us just a few feet from the road. As we approached them, to our surprise each of them cowered behind a slender tree as though trying to hide. After we had passed them, Johnston explained that the lions in this area had become wary of vehicles such as ours because the military had shot lions in this area. So, the lions were taking care not to be in the open.

Continuing on our way, we passed another pride of lions close to the road in short, open grass. So, we got a good look at them. What we saw had to be a rare event. One of the females that had been lying down, got up, stretched, then slowly walked past one of the males. Suddenly, the male rose, walked over to the lioness, and mounted her. A few quick humps and it was over. Then the lioness slowly walked away, laid down on its back, and spread its hind legs in a completely relaxed manner. Our thought was that this would be the best position favoring conception. In any case, the look on the lioness's eyes was one of complete satisfaction.

That afternoon we hooked up with Johnston again. He was to be our guide for cruising the nearby Chobe River. Our aluminum boat seated eight comfortably: six from the hotel, Johnston, and the "captain." We began by going up river so that Johnston could show us crocodile that were twelve feet long at least. Groups of three or four seemingly resting on the mud banks with about half their bodies submerged. True to form Johnston allowed the guy managing the motor to drift up to the bank about two meters from one of them. This by itself made Vicky uncomfortable for we had seen how quickly these treacherous reptiles can move. But they just laid there soaking up the sun. After that we began searching for hippos, and soon found them, more hippos in one spot than we had ever seen before. Some of them were on the river banks, others on the sand bars, but most in the water. From a distance we watched as some would come to the surface, open their gigantic mouths to what looked like the breaking point, tip to one side, and go under the water again. Before long, we drifted so that we were amongst them in the river. Some would pop up around us then submerge. Although we knew they were all around us, we couldn't tell exactly where. Vicky and I had heard that more people are killed by hippos than by lions. What would happen if they toppled our boat? Rather nonchalantly the captain gave us the *good news* that hippos cannot attack you while they are under water. They keep their eyes closed; besides, they'd choke should they try to bite. So, should we tip over just stay below surface as long as we could then swim to shore. What a relief that was! I didn't get a good look at Johnston, so I wondered if he were grinning as we heard this.

As we were heading back to our docking point some distance away, the wind picked up. Soon we say lightening in the distance followed by thunder that revealed a storm rapidly advancing towards us. For the first time Vicky said she noticed fear in Johnston's eyes. One does not want to be on the water *in an aluminum boat*, with lightening flashing all around us. We did make it before the storm hit to everyone's relief. Again I tipped Johnston and told him that I thought he was a great guide, without revealing what Vicky thought of him. Before we parted. I wanted to know how long he had been in Botswana and what was his country of origin. To my surprise, he said he was a native of Botswana. I let it go at that because I suddenly realized he *was a native African*, but one so light-skinned with a vocabulary, accent,

and mannerism that I sounded English or Dutch. But with a name like Johnston, little wonder that I hadn't gotten it right. But it wouldn't have made any difference. I thought he was just one good guide.

With our time up we rode to the airport at Victoria Falls ready for the one or two hour flight back to Harare. We arrived in plenty of time to check in, only to be told that the flight had been delayed. Periodically, we were told there was nothing new to report. This went on all morning, then into the afternoon. Finally, around 5:00 the airlines rep told us that the flight had been canceled and that he would find overnight lodging for us. Vicky and I were among the few who were deposited at the Rainbow Hotel Victoria Falls. Although billed as economy we found the hotel to our liking, especially the uniqueness of its pool bar where one could order a drink while sitting on submerged stools. Here, we had an extended discussion with a New Zealand couple and a father and son from Ireland. Later, we enjoyed a floor show involving native dancers.

All went smoothly the next day and we were back at the Meikles before noon. That afternoon Francis Podmore and his wife Ann joined us "for tea" at the hotel. Later, he showed us the Univ of Zimbabwe, the country's largest and oldest, where he was a tenured professor. He parked the car and we wondered around among the red brick buildings and the Central Green. Because it was the weekend few students were around. From there he drove us to the area bordering the University. What impressed Vicky and me the most were the high fences topped either with razor wire or glass shards embedded in mortar. The houses behind those fences and gates, when we could see them, were modern. Francis said he and Ann did not like living behind such barriers and hoped to leave once he retired. That evening Vicky and I had our usual pre-dinner drink in the hotel's pub that seemed so Colonial with its low ceiling, dark wood paneling, black waiters in safari dress, and quiet. Then to the Marabele Room for dinner where we enjoyed an interesting conversation with two East Germans. By now, we had caught on that we should order senior portions, which were smaller, yet large enough to fill us up.

The next day we had a couple of hours before the hotel bus took us to the airport. So, we walked around town, stopped at a fine clothing store where I bought a pair of khaki short and knee socks (with a nod to the English), and bought a book by Wilbur Smith, who writes pulp-fiction adventure stories about this part of the world. I had read him before and wondered why I had finished the first and bothered to read another. Even so, I bought this one as a remembrance of our times here.

It was a 90 minute flight to Matsapha where Una and Boet greeted us. Stepping out of the plane the hot, muggy air reminded us again that we were here in the summer time. We rented a car and drove the short distance to Malkerns where we would be staying. We spent the afternoon and evening talking, talking, talking over drinks and dinner. We had a lot of catching up to do.

I woke up at five a.m. to the sound of birds chirping outside our window. I dressed, quietly unlocked the front door, and slipped outside. The early morning was calm and cool, and soon the sky would turn to a gorgeous bright blue. I proceeded to walk around the Vickery farm. Chris was now growing sugar cane as a seed crop, experimenting with turmeric, and currently was expanding into vegetables and ornamental shrubs. Over the years Chris had experimented with all types of ventures, which one might do as a wealthy landowner. An hour later I returned to the house where hot tea and "biscuits" were awaiting me. Una came out and we talked awhile. After she left I picked up P.D. James' new book, Original Sin.

Our week in Malkerns went by quickly. Una showed us her photo album, Boet showed me his in-laid wooden tables, Vicky and Una played bridge at the Club, and we attended the regular Wednesday night dinner with Una and Boet, Wendy and Chris, the Hulleys, the Jacksons, Small McCloud, and the Granobles. The next day I drove to the Research Station. Passing through the main gate I saw the new conference and training building off to the left. A nice addition, I thought. Continuing on I stopped at the main office, which hadn't changed. There I

saw Paul Mkhatshwa, who was still the CRO, Motsa, and Zodwa who invited me to tomorrow's weekly meeting.

I arrived mid-morning to see Zodwa chairing the session. She introduced me to some in the group whom I didn't know; but those who I did know gave me a hearty welcome. I recalled Neil telling me that Zodwa's shyness would keep her from advancing. But here she was chief of a section and leading a discussion among researchers. They were still discussing FSR, which made me happy, but disappointed with the problems they were confronting. One of them complained that cooperating farmers still did not understand what on-farm trials were all about. Paulos said that some farmers wanted the Station Manger to plow their fields. What made his statement worse was the way he talked about the difficulty of getting this done and *not* why this shouldn't be done. Then the discussion turned to the problem in which station staff wanted control over the areas where the on-farm trials took place, even after the trials were completed, and whether these trials were part of research or demonstrations of successful research results. Afterwards, I talked with John Pali, Doug Gama, Michael Nxumal, and Edgar. I left being disappointed at how so little of FSR's concepts had taken hold. They seemed to be trying, but still really didn't know what they were doing. Before leaving we dropped by to see Sebe, who had returned to Malkerns, and Enid Pali who was teaching middle-school girls how to type. That afternoon, Bongi and Vicky had a good "chat" saying that she and her two boys were doing well. Being related to Motsa provided her stability.

Vicky and I had the next day to ourselves. I drove her "up the hill" to Mbabane to get her hair done. While waiting, I walked around the small business district reminiscing about our times there: the small coffee shop frequented by Pitts and Jim, the supermarket where I was able to sell some of the broccoli Doug Gama had promoted, the AID building, and the small shops where we used to browse. Then we drove to the Usutu Golf course, stood out on the first tee and thought about some our play here, then to the Foresters Arms where we had come for Sunday noontime dinners. That evening we dined at Malendela's. For some reason Farmer's lunch with a group of friends and his ordering of fume blanc remains clearly in my memory.

Vicky and I were lucky to be here when the Malkerns Club was holding a fund raiser called a *Potjiekos*² cook-off on the rugby field adjacent to the Club house. The event drew a large crowd, not just from the local area but from Mbabane as well. Una guided us to friends we hadn't yet seen and to some we hadn't met before. I can't believe how many kisses on the cheek, I received. We eventually came upon Chris Vickery deeply engaged with his pot, for as usual he was contending for first prize. We watched the fireworks that closed out the event. The Malkerns Club knew how to put on an event like this! Because the food from the pots was not intended to feed the crowd Vicky and I finished off the day by going to the Calabash. Vicky ordered fillet mignons and I the bratwurst and we shared a bottle of Boschendal's Gran Vin Blanc. Yes, I know steak and red wine go together and brat and beer go together. Still, we thought this might be our last chance to savor this wine that we liked so much.

On our last day here, I "slept in" till 6:30, had the customary tea that Una had prepared and walked around the Vickery farm. Then, Vicky and I walked past Chris's nursery to his and Wendy's large, two-story house where a small group had assembled for brunch. Besides our host and hostess and Una and Boet were Joe (Chris's father), Wendy's and Chris's son, and the McClouds. Sitting on the patio I marveled again about the beauty of this area: the large fields of pineapple, smaller fields of sugar cane, maize, and other field crops, and the wonderful weather at this time of year. Living where Wendy and Chris did offered some excitement, what with the resident hippos, the occasional crocodile resting at their doorstep, and the python at the lower levels. We started out with mimosas then feasted on eggs Benedict, ham, fried potatoes, pastry, and fresh fruit.

We had an early morning flight from Matsapha to Joburg, laid over for three hours, then on to Windhoek, Namibia. Gary, who was part of our tour package, met us there, confirmed the arrangements while in the county, then drove us 40 km into town where we checked into the

² A Dutch term referring to meals cooked in a heavy cast iron pot.

Villa Verdi. With his advice we made dinner reservations at the Furstenhot Hotel just down the hill from us. I napped for awhile, swam in the hotel's pool, read, then walked downtown to see how this city of a quarter million compared with some of the other African cities I have known. This too was a modern city, but with a limited number of tall buildings. I walked along one of the main streets passing small shops, restaurants, and entertainment centers, which distinguished it from some of the large African cities I have visited. If anything, the place reminded me of Blantyre. We enjoyer our dinner at the Furstenhot, where we were surrounded by white faces unlike my walk through town where I met few. Our biggest problem was the size of our portions. Vicky and I were beginning to notice that the Germans here and the English and Dutch in southern Africa were big eaters, with their girth showing it.

As usual, I got up early the next morning to walk around the neighborhood. It could very well have been my last walk. After I had gone several blocks from the hotel I reached a divided four-lane artery leading to the city center. Forgetting where I was I looked to my left, saw no traffic, and was about to sprint to the island dividing the two way traffic. But at the last minute, I looked to my right and saw with freight that the two lanes I was about to cross were filled with cars coming over the rise at perhaps 80 km/hr. I broke into a sweat just thinking how I would have been "splattered" had I not stopped. Even if I had survived being hit by the first car, those following closely behind would have killed me. This was a repeat of my experience in Nairobi. Only two other times have I been in danger because of this reversal of directions. The first of these happened not long after our return from Swaziland. This happened on Hwy 14 after leaving the Ft Collins Nursery. Instead of turning right after the traffic had passed, I drove through the divider intending to turn right, which would have been heading into the westbound traffic. At the last minute, again, I caught myself, looped around in the broad intersection and got back into the east-bound lane without incident. I hadn't been in real danger but still I was shaken. The other time occurred on Country Club Rd. This time no traffic was in sight and I nonchalantly pulled into the west-bound lane where I continued on until a panel truck came around the bend heading straight at me, but at a distance. That gave me time to pull over to the

wide parking area next to Long's Pond. After the truck passed, I returned to the "right side" of the road.

Our flight to Swakopmund, which took only 45 minutes, landed us on the coast about midway between the country's northern and southern borders. This small, vacation town of 40,000 is nestled in the desert next to the mouth of the Swakop River, a major river in western Namibia. The town's name is derived from what the natives call "emptying of the bowels," to put it politely, because of the large amount of dead animals, tree limbs, and debris amidst the brown water during the flood stage. Leaving the plane we were surprised that it was rather cool, not hot as we had expected. A rep from our tour group drove us to the Swakopmund Hotel where we would stay for three nights. The hotel was striking! A tan stucco building with a square tower above the main entrance that rose some 15 meters above the second story roof with an elongated swimming pool in front. As we walked around the pool to the entrance we saw a crew of cameramen who were using this elegant entrance as the backdrop for a film in progress. The reception area, with arched dividers leading to adjoining rooms, was painted in sparkling white, reminding us of some of the places where we had stayed on the Garden Route. The diningroom was in oak paneling. One end of the hotel was a gaming room that included roulette wheels. Our room on the second floor was light and airy with French doors leading to our own small balcony.

We had scarcely settled after lunch when Tim, another member of our tour group, arrived to drive us 120 km north along the barren coast to see thousands of fur seals at Cape Cross. Once there, we observed a memorial dedicated to the Portuguese explorer, Diogo Câo with an inscription 1486 to 1986. Along the way Tim told us that we were driving along the Skeleton Coast, called that because of the whale and seal bones littering the beach and the hulls of ship wrecks caused by the fog and heavy surf. Back in the days of human-powered boats it was possible to land onshore, but not to launch from shore. Stories abound of shipwrecked sailors searching for refuge. Bushmen called it the Land God Made in Anger, the Portuguese calling it the Gates of Hell. During our return I marveled about the smooth, well kept road. Tim

answered by telling us about using sea salt as a binder instead of asphalt. The highway we traveled was smooth, compact, and free of potholes, which testified to the suitability of using salt water as a binder when the rainfall low, in this case less than 20 mm annually. That evening when Vicky and I went down to dinner the maitre d' said that evening they were offering a buffet, which didn't please us. But at this point we were tired and didn't want to search for something else. So we stayed, and were glad we did when we learned it was a Mongolian barbecue, a favorite of outs at the Royal Swazi Sun.

According to habit, I rose early the next morning to explore the area. I walked down to ocean front and along the beach past a long row of comfortable looking residences with their green lawns, flowerbeds, and shrubs. From there I walked up the incline and along the north edge of town past historic churches, government building and homes. All neat and well preserved. Then back past small tourist shops and one-story professional offices in time breakfast with Vicky before Tim's arrival.

First off we rode south along the shore where we could see huge sand dunes off to our left. Tim explained that Dune 7 at 345 meters is the highest in the world. Typically the sand blown by ocean winds causes the sand to pile up to its maximum height, then fall off abruptly at its angle of repose. For dry sand that's slightly over 30°. For comparison think of the maximum design slope for our major highways in the States as being only 6°. As we approached the ridge to get a better look, our driver continued driving to the crest, then over the edge. Rather then tumbling, as we feared, our vehicle just slowly coasted down the side riding the sand as it gave way to our weight. That out of the way we later stopped so that Vicky and I could explore the sand dunes on foot. We followed Tim as we trudged up the sand slopes. We saw black beetles, the tracks of lizards and, on one occasion, the those of a sidewinder that caused us to look more carefully where we were walking. Later, I read that they are like our rattle snakes, but not as venomous. From there we headed west to see a mud flat that contained the 400-year-old fossilized footprints of elephants. Continuing on our way we passed the town of Walvis Bay then west again onto the narrow peninsula called Pelican Point. As we rode along this barren strip we were struck by its starkness, our vision limited because of the

strong winds blowing inland, and wondering what if anything could survive here. Yet we passed hundreds of seal, pelicans, and flamingos. I also enjoyed seeing the gabion baskets that I had learned about at ISC. These are used to protect land from erosion and structures from disintegration. Given the strong waves and currents, I could understand the need for them.

It was well past noon by the time we returned to the mainland and Tim dropped us off for lunch at the Raft, a popular restaurant at the end of a short peer. Vicky and I were ready for a nap once we got back to our hotel. Towards evening, we walked down to the Strand Hotel on the pier, a place that had interested me that morning because of its German decor. Inside, what I had sensed proved to be the case. It reminded us of our stopovers in Frankfurt: the menu listed bratwurst, sauerkraut, schnitzel, German beer and Rhone wine. But, of course! This had been a German Colony with many Germans remaining after independence. For beer we tried Tafel, produced in Swakopmund, no less, connected with Hansa a German beer produced by South African Breweries.

Early the next morning I repeated the same routine, but following a slightly different route. Wayne was our guide this time. Like our other two contacts with our agency Wayne spoke excellent English. There was little doubt in our minds that these three were of European descendants. Gary may have been in his thirties; the other two were good looking young men in their twenties.

Today was to be in sharp contrast with yesterday's excursion. We drove due east following a riverbed to a point where we had a impressive view of the badlands we were about to enter. To get a better feel for the area, Wayne parked the vehicle and we got out and walked along narrow rock ridges. We needed to watch our step as the sides, though far from vertical, were nevertheless steep without much of anything to cling to were one to slip down the side. The bleakness reminded us of our trip to Jericho where our guide pointed out the site where the Good Samaritan gave aid to one who had been beaten and robbed. Continuing on our way, Wayne searched and finally located a few Welwitschia, considered to be "living fossils," some of the larger ones being 1,000 years old. And, they look it: the broad scraggly leaves, seem to hug

the sand and rocky soil, meandering from the base amidst dead leaves. Although we felt we were alone in our explorations, our route was one taken by other visitors because Wayne next took us to a back woodsy place for lunch obviously set up to accommodate travelers such as us.

Once we returned to the coast, I asked Wayne if he would show us how the locals lived. Turning west from the road we followed a dirt path to a small group of huts made of sticks held together by mud, a corral containing a few goats, and a grove of stunted trees. Although the living conditions looked grim to us, they were probably similar to those of others who live in the interior.

As we parted, I told Wayne that I had expected to see desert elephants like those I had seen on TV, scenes in which these elephants plod through the desert past sand dunes, thinking how odd it looked to see them in such an environment. How they could go several days without drinking water, but could obtain the moisture they needed from that contained in plants and roots; how they traveled in small groups thereby putting less importance on finding water and food in large quantities; how they stood taller than other elephants though weighing less, how their padded feet and by taking long strides made it easier for them to walk in the sand; and how a mineral deficiency had shortened their tusks. That deficiency was probably a godsend that helped protect them from poachers. All this had given me the urge to see them. He said we would have to wait till we reached the Etosha National Park, where we would be going tomorrow. Later in the day, Vicky and I strolled the downtown streets and found a "tourist" shop where I bought a t-shirt with the head of a large, tusked elephant. Now, I wish I had bought the one with the heads of the big five as well.

At mid-morning we boarded a 20-seat commuter plane and flew straight north to the southwest corner of a large dried up lake called the Etosha Pan, which is part of the National Park. We landed briefly to allow most of those on the plane to get off, then we continued to the northeast corner that was our destination. The total trip took less than two hours. We checked into the Mokuti Lodge where we had reservations. The lodge's name means "in the bush." We

were indeed in the bush, but the lodge looked like the first-class resort that it was. In time we were to learn that the Park is loaded with all sorts of places to stay, from those more elaborate than ours to safari lodges, tent camps, and even one listed as "going native." We also saw the many watering holes dotting the southeast side of the pan, which must account for those who got off the plane before we did. After finding our room, having lunch, and resting we looked around. The resort was nicely laid out: a large reception area with an arched ceiling, walks that led to rows of thatched guest rooms, a large meandering swimming pool bordered by palms in a grassed area, and a snack and drinks bar off to one side. The lodge was not crowded and we saw few heading out to view game either in the morning or the afternoon. On our last morning viewing, it was just Franz, our guide, and us. It may have been an off season or a slow year. We liked it as it was, but would have gotten along had it been crowded as with other "safaris."

At 4:00 in the afternoon we met Franz who was to take us on a three-hour ride through the game area. He told us that he comes from Johannesburg and had been an insurance broker. We left the lodge and were soon traveling the dry and dusty flat roads that abound in the park. Franz explained that the white rocks that we were seeing both left and right were called *calcrete*, a calcareous material similar to what we call hardpan. That's because we're in a lake bed. Because of this, the trees tend to be slender and dispersed. Consequently, he said that we wouldn't be seeing primates as we would in a tropical forest. However, before long we came upon a small group of elephants walking along the road in front of us. They paid no attention as they continued stripping the small trees of their leaves, bark from the tree trunks, and obtaining moisture from the roots of trees they had overturned. I didn't realize it at the time, but these were the very Namibian elephants I had wanted to see. I just hadn't expected to come upon them this way. By the end of the day we had seen lots of giraffes, kudu, black-faced impala, springbok, and bontebok.

Our early morning and late afternoon scouting trips yielded sights of what we had seen the first afternoon, the elephants excepted, as well as black rhino, hyena, oryx, guinea fowl, and hornbills. And, for the first time for us, a two meter black mamba, a honey badger, a mongoose, and a wild cat. True to form Vicky spotted the cat before our guide did. It looked like and was about the size and shape of one of our house cats. Seeing it made us wonder how it could survive in this hostile environment. But then we've seen our cats over the years stalk birds and mice as being a natural instinct.

That afternoon we lounged around the pool, had lunch, then departed at 5:00, the hotel's desk clerk having already tagged our bags. The two minute drive to the airport was timed so that we didn't even need to enter the waiting room, had there been one. Our flight taking us back to Windhoek was not long; but then we waited till midnight before departing for Frankfurt. The overnight flight landed us in Frankfurt where, looking out the window we saw a freezing, gray, overcast morning with snow on the ground where we would overnight at the Sheraton. We had quickly gone from the sunny warmth of Namibia to the cold winter of Germany.

Our United flight back to the States was uneventful as they usually are. Becky met us at the Baltimore-Wash International airport. We stayed with her and the family for five days. During that time I talked with Remington, David, and other CRS staff about my assignment. Although I felt I had bombed out on the workshop, I got no sense of that being the case. By Nov 25th Vicky and I were back in Ft Collins, having spent 72 days away from home. Again, it was good to be back.

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Chapter 23: The Philippines

I had no pressing assignments awaiting me when we returned from Africa in 1997. This freedom allowed me to learn more about the statistical lecture I had problems with in Addis. I used CSU's library to check out books on statistics such as those by Cook & Campbell and Poate & Daplyn, and talked with Slade and Casley at the World Bank about M&E. Casley told me that the Bank had withdrawn its support of M&E mainly because of difficulties with it's application in developing countries. I also returned to Gish's classic book on the statics of census taking. Despite this effort I remained about as much of an ignoramus as ever I had been. I continued advising Kari Egge through letters and faxes. She was well into her PhD dissertation on Public Health at Tulane Univ. She sought my advice, mainly on sampling and questionnaire design, and asked me to review relevant portions of her dissertation. After graduation she obtained the post in Haiti, which she had wanted. I maintained contact with Kibru and Messele concerning their efforts at M&E, and with two Alemaya Univ professors. I wrote a professional paper on the economics of natural resources, which I had wanted to do for some time. Finding a publisher was not easy. Eventually, reviewers for the Journal of the World Association of Soil and Water Conservation did accept the paper for publication. I'm still waiting. Robby Laitos and I flew to Wash, D.C. to see what direction Tom's company, CADI, might do to broaden its consulting opportunities. Vinio Flores, one of my Peruvian associates, contacted me about joining him in bidding on opportunities in Peru. But, that never panned out. And so on. Although I had retired from CSU four years earlier, I never intended to quit working. But, I wasn't making much headway. In the meantime I found time to play golf, work in the yard, and otherwise keep myself busy. It was during this period that Bill Schmehl died of Lou Gehrig's disease. Soon after our return from Africa I met Bill one day, noting his slurred speech. I chided him for drinking on the job, which was obviously a joke because I knew he didn't drink. At the time I didn't realize how serious his condition

was. Then, on March 23rd I got another one of those telephone call. This one came from Mohammed Haider, whom I knew when we both were part of Clyma's Water Management team. He reminded me that he now worked for the Asian Development Bank in Manila and that he had visited CSU seven months ago seeking ways to improve ADB's M&E program. He had asked Bob Young and R.K. Sampath and me to attend. He said he was now leader of a team to evaluate a project in the Philippines completed five years ago called the Highlands Agricultural Development Project (HADP). He wanted me to be the M&E specialist on his four-man team. Was I interested? I readily accepted because I wanted to broaden my experience with M&E and I liked the idea of visiting the Philippines for the first time. All he asked was for me to prepare a few tables supported by five-pages of explanation. Sounded easy enough. As it turned out this assignment wasn't easy at all.

Haider, as we called him, had received his PhD in Ag Economics¹ in 1982. I first met him when were both members of Clyma's Water Management Synthesis project. Also, he was our contact with the AID Mission in Jakarta when I was working with Nobe on the Water Resources Investment Strategy study.

The intent of HADP was to reduce poverty in the low income northern provinces of Benguet and Mountain by increasing agricultural production. The means for accomplishing these objectives were by improving irrigation water management, expanding agricultural support services, and constructing and rehabilitating farm-to-market roads. In addition, the project was to address environmental degradation by reducing the practice of slash and burn, building terraces, and implementing other soil conservation measures. Total estimated costs was \$26.9 million.

¹ The Impact of Egyptian Agricultural Policies on Farm Income and Resource Use, 1982.

On Saturday, May 10th, Vicky drove me to the Loveland Airport where I would take the connecting flight to Denver then on to San Francisco, Seoul, and Manila. I traveled first class to San Francisco, Connoisseur to Seoul, and first class to Manila: a luxury I'm not used to. So, the 18-hour flight didn't seem long. Customs in Manila was a breeze and then I went into the terminal itself. Looking around I spotted a sign labeled International Desk and below this a heading saying "ADB and IBRD consultants check in here." Within half an hour the driver deposited me at the Manila Galleria Suites, a lovely five-star hotel where a booking had already been made for me. Couldn't have been any smoother. I was beginning to think, working in this part of the world for an international bank was pretty nice.

During the flight to Seoul, I thought about my chance meeting with Ray Renfro a few days earlier. Interesting how our paths kept crossing. We had first met shortly after my arrival at CSU where he was working on his PhD in Ag Economics. We had lots to talk about then because of our mutual interest in international development. We had met during one of my earlier trips to Islamabad where he was an economist with USAID. He had married a Pakistani and was happy, although, he still aspired to being a professor at a major university. This was when I realized for the first time just how difficult it is for PhDs to land a good faculty position. Made me wondered how I made it. Then, during our first trip to Yemen we saw each other again. AID had transferred him to Sana'a several years before. He invited Vicky and me to his apartment. Over dinner he said he was leaving soon and was glad of it. Now, I saw him again in Manila where he was with ADB. Over lunch the next day we talked for a couple of hours. He seemed confident in his job but that he and his wife thought Manila was the pits. Both wished to return to Pakistan as soon as possible. He thought my assignment should be easy From there we drifted into the question of small loans, which he thought worthwhile, to which I agreed adding that as I had said during the Addis workshop, "I have no problem subsidizing the poor, but don't call loans to them as free enterprise." Then, turning to other things, I thought about Ray's nonchalance about the evaluation process as being close to what Haider had once said to me, "My job is mainly managing consultants." What?

After a rather fitful night due to the 15 hour time difference, I got out of bed, showered, went to the dining room where a sumptuous breakfast buffet awaited me. Then I walked the few blocks to the Bank where Haider awaited me. We talked for awhile about my trip, he introduced me to a Rene, a young Filipino who will be working with us, arranged for me to receive my per diem allowance, and had lunch at the large mall adjacent to the Bank. Haider explained that another consultant would be coming once I complete my assignment. Earlier he had asked if I were available for the follow-up assignment. When I said I might not be available he went ahead with this other consultant, which was okay with me. I think that's what he said, because he often talked so softly that I could scarcely hear him. By mid-afternoon I was fading, so I returned to the hotel, took a short nap, and packed my bags. Haider had told me to do so because we were headed out for a 16-day field trip the next day. Wow! That was quick. He said little about what to expect. I guessed I would find out soon enough.

The next morning Edy Brotoisworo, a Filipino, was the fourth member to join our team. He was a biologist with a degree in ecology who worked for the Office of Environment and Social Development. Before long I grew to like this professional, modest, and friendly fellow. He did have a quirk about carrots, if that's fair to call it that. He wouldn't eat them because he said the chemicals applied to the soil during the growth stage contaminated them. Our driver proceeded to take our team to the National Economic and Development Authority (NEDA) in Pasig City, one of several municipalities within the greater metropolitan area. A group of about 20 awaited us. Haider whispered to me that this was our "kickoff" meeting intended to set us on the right track. After welcoming us one of the Authority's Directors, got down to business. He said that we should look at the project's efficiency in resource use, impact on the environment, and improvements in rural income in the targeted provinces. He asked how we were going to measure project performance Then, answering his own question suggested we look to the Internal Rate of Return, which from previous analyze, had fallen from 18% to 12%; then he reminded us that 10% was the cutoff point.

Haider did the talking for our side followed by a lot of give and take over the next three hours. After the meeting I talked with several about my experience and how I would be helping Haider. I found the atmosphere congenial and was looking forward to my assignment.

After the meeting we drove north to Baguio in Benguet Province where we would begin During the five-hour trip I concentrated on reading the CHARM report, short our investigation. for Cordillero Highland Agricultural Resource Management. Finally, we arrived at Camp John Hay on the city's western edge. Passing through the entrance we drove along neatly sculptured grounds interspersed with tall pine until we arrived where we would be headquartered for the next several days. The Camp itself was historic. This was formerly a rest camp for US military personnel, which had fallen into Japanese hands during WW-II. The motel-like rooms where we stayed were part of a large complex: a central part with meeting rooms, restaurant, ballroom, and our rooms fanning out on both sides. Eventually, I discovered the beautiful 18-hole golf course nearby and the Club House appropriately called the 19th Hole. It was a rambling wooden structure with a 120° view of the golf course and adjacent woodlands below, where golfers and others would come to eat and drink. I found the food to my liking. The layout inside along with the waiters and other attendants reminded me of our military bases back home. I was amazed to find something like this in northern Philippines. After we had checked in, I strolled around the golf course by myself then returned to the 19th Hole where I ate dinner by myself. Then off to bed early, since I was still recovering from my long trip. I still was in the dark about what we were to accomplish during this extended field trip. Perhaps I would find out tomorrow.

The next morning we drove to the Baguio Experiment Station where we met with a large group headed by Ron Odesy, CHARM's current manager. He had been HADP's project manager during its final stages. Those attending were the Provincial Irrigation Engineer, the District Roads Engineer, the Director for Agricultural Research and Extension who among other things had responsibility for the Seed Potato Storage (SPS) program, and two M&E specialists, one in agriculture and the another in irrigation, the Regional Director for NEDA, and five

CHARM enumerators. Done with the introductions Ron addressed several issues relevant to our review of HADP.

He began by saying that the end-of-project survey had not been completed and that the CHARM program was only beginning. He described how the commingling of the approvals by the IFAD, ADB, and the Philippines Government had caused delays and that initial staffing for HADP had been difficult. Eventually the Ministry of Agriculture was brought in for help. This turned out to be a good move because several were happy to take a leave-of-absence thereby receiving higher salaries than HADP could offer. Haider followed up by describing the way HADP was focused on ag development in the Benguet and Mountain provinces primarily through irrigation, roads, and support services. Our task was to quantify project accomplishments by comparing results *before and after* the project. Edy followed by talking about reducing cultivation on steep slopes, limiting reliance on chemical pesticides, and reducing soil erosion through better design of farm-to-market roads. Returning from a coffee break, Ron opened the meeting for general discussion.

Just a lot of information (more than we could possibly assimilate) and questions (more than we could possibly answer). Still, the show of interest was good; and by the time we left at least I had a better idea about the responsibilities of the various organizations affected by HADP. As important as anything was Ron's involvement in HADP and CHARM and his show of interest in what we would be doing. He was to accompany us on several of our field trips, as well as helping Haider with names and places. Thankfully, English was the prevailing language.

During the afternoon we visited the manager of the Land Bank who told us about the support it provides small farmers. While Haider was talking with the manager I noted a wall chart that showed that the number of loans and repayments were only 40% and 31%, respectively, of those predicted. I mused that the Bank was either having a difficult time getting established or its operating targets were too optimistic. Then I tuned back in. The manager said that coops typically comprise 60 farm families, although the size is supposedly limited to no

more than 50. Coop types are marketing, credit, and production, or a combinations of them. Part of their problems rests with marketing, supporting what we had heard this morning. The Bank charges an effective annual interest rate of 14%, which is only slightly higher than the official government rate; although, some farmers are willing to pay traders higher rates because that relieves them of having to sell their produce.

Back at the hotel Haider suggested we go for a walk. In time I figured that he liked to walk as a means of relaxing and clarifying his thoughts. I agreed thinking that, now he will explain the purpose of our trip as it relates to our report. Instead, he spent the time relating the problems he's having with his boss at ADB and how he misses his two young sons, but no mention of his wife. I should have pressed him about the purpose and manner of our trip, but I was still just getting to know him. So, I thought it better to wait and see how things turn out.

Sitting on the veranda for breakfast the next morning I listened to two sitting close to me who sounded like they were Americans. So I asked. One said that his father had been at John Hay when the Japanese overran the place. Eventually, his father was imprisoned on a ship in Manila Harbor and killed when the US bombed and sunk the ship. He had come to the Philippines to retrace his father's steps, beginning here.

After breakfast I met up with Haider and Rene, thinking we would head north. Instead we drove to Trinidad, a nearby town, to visit the Trading Post. The place was a virtual beehive of activity. A galvanized iron roof covered perhaps a hundred small cubicles where farmers had mostly vegetables on display. I saw fresh bell peppers, chile peppers, scallions, *womboc* (Chinese cabbage), potatoes, string beans, snow peas, squash, cucumbers, and tomatoes, all neatly cleaned and nicely displayed. I learned that those here belonged to a marketing coop of some 300 farmers from Benquet Province. Those buying the vegetables owned various classes of pickups, even a flatbed truck, that they would load up and drive to he wholesalers in Manila.

Responding to a question about the Coop I was directed to a building nearby. There, I talked with the vice-chairman who told me about the Coop's activities and membership. They buy from its members, but can't come close to handling the volume of vegetables passing through this area, cabbages and potatoes being the most traded crops. Besides providing a marketing outlet, the Coop also provides its members with supplies and credit. Occasionally their prices are only slightly better than that traders offer at the "farmers' gate." By the time I left I had obtained information on transportation costs per kg, interest rates on their production loans, and a comparison of the value of produce here versus that in Manila.

In the afternoon we drove to a center doing research on a parasitic wasp call diadegma..

This tiny wasp about the size of a nat has been accepted as an way of protecting cabbage plants from the diamondback moth. Because cabbage is one of the major crops of the area, its control is important. Earlier, government agriculturalists had recommended a cyanide compound as a means of protection. In 1992 a cyanide poisoning scare occurred throughout the region. With knowledge about the effectiveness of the diadegma it was an easy task to convince most farmers to change their treatment methods. By the time we left we were impressed with this application of Integrated Pest Management (IPM).

On our way back to Camp John Hay, we stopped at the Shilan multi-purpose coop located on the outskirts of Baguio. Most of its members farm small plots on the steep slopes leading down to the river to produce cut flowers. And then another cooperative; but this one the Cooperative Bank of Benquet. We began by talking with the Divisional Manager who described he Bank's activities. They lend for agricultural, commercial, industrial purposes, research, and feasibility studies. After awhile the Bank's General Manager joined up. He said that the Bank's primary objective is to help the coops become stronger financially by expanding into marketing. He said a few of the large traders, with warehouses in Manila, operate here. Prices in Manila have been stable and high, compared with prices here. I asked if this implied effective competition or monopoly? I suspected the former because of the large and growing demand.

This is the second time in the last two days that marketing has surfaced as an important topic, and a tribute to HADP's focus on irrigation. They support the Seed Potato Storage program and are looking for ways to promote other agro-industry activities. Before leaving I asked him what he thought of HADP's support of daily radio programs that announce crop prices. He agreed that the more information of this sort the better. But one has to be careful. He recounted an instance in which a farmers heard about favorable prices being paid in La Trinidad. But by the time the farmer got there most of the prices had fallen markedly because other farmers closer by had heard the same message.

With time to reflect on our way back to John Hay I noted that we had visited two marketing coops and two banks without my knowing beforehand what our schedule for the day was to be. Even so I found the Trading Post most helpful in getting a handle on the vegetable market and our last stop at the Cooperative Bank helpful in understanding the credit situation in the region. I wasn't sure how I would use information from the latter, but it did provide background on the commercial setting. After we got back to our rooms I looked forward to discussing these visits with Haider. But, instead, he continued to dwell on his problems at ADB.

After two days of riding in and out of Baguio I had become acquainted with this inland city of a quarter million. Being a mile high the whole area is a favorite vacation spot for those from Manila, and other areas to the south, who seek a respite from the heat. The year-round temperature, which averages in the seventies, does not vary a lot, although, the monsoons cool things off when they occur. The city itself reminded me of San Jose, Costa Rica because of its cleanliness, parks, winding, cobblestone streets, abundance of two-story buildings, and signs reading *bodega* (store), *iglesisa* (church), *and calle* (street): The prevalence of English being spoken throughout the country attests to our occupation, yet *Tagalog*, the native language, is the first language of some and the second language of most.

Having spent the past two days here, Haider said that he wanted to spend the next two days checking on activities in northern Benguet Province. Getting there meant long, hard drives

on gravel surfaced narrow and winding mountainous roads that were often without shoulders or guard rails. Once our vehicle skidded as we went up a 13 percent grade causing us concern because of the sheer drop off to the side of us. Occasional rain added to the road's slipperiness. Our driver said that in his 16 years of driving these are the worst roads he had ever encountered. I took advantage of the time to do my own traffic count of mostly trucks, buses, and jeepneys,² and the few passenger vehicles. Ron and a couple of his enumerators came with us to show HADP's accomplishments in irrigation, roads, cultivating on sloping lands, seed potato storage, coops, farmer support, and relations with regional mayors.

Shortly after leaving Baguio we stopped to see a "loading platform." Such platforms had been included in HADP as a way to facilitate the marketing of crops. The two-story structure made it possible for farmers to place their produce directly onto the tops of the buses on their way to locations such as the Trading Post. Because now jeepneys had become the most common means for transporting produce to market, HADP had stopped building these structures.

At various spots along the way, Haider would have us stop and follow him as he left the road to walk down paths to observe irrigated vegetable and rice fields, and newly constructed bridges. We even walked some distance to find and cross a 150 meter suspended foot bridge funded by HADP. On one occasion we walked up an embankment to get a better view of the area then continued through a small village and past farmers mud-plastered homes. When we met an inquisitive farmer we would, through a translator, ask questions about the prevailing crops. farming practices, and local markets. Then, we would ask if those in the area knew about HADP, and if so, what they thought of the program.

From the farmers we met we learned that the two main growing seasons for vegetables were May to August and August to November. Irrigation farmers can sometimes plant a third vegetable crop. Because rice takes longer to grow, farmers who grow this crop only have time

² These were jeeps left over from the US Army's presence here during WW-II that were enlarged and used as multi-passenger vehicles.

for a second crop, which would be vegetables. Most of the rice grown by these farmers is for their own consumption. An ag technician accompanying told about the failure of the Government to persuade these rice farmers to switch to high-yielding varieties. While the yields are high, farmers prefer the taste of their traditional varieties. Pesticides are commonly used, fertilizers less so. Sometimes when farmers cannot obtain finances they cannot plant the full extent of their holdings, which might not be more than a quarter of a hectare. This is not as dire as it might seem since most households have family gardens and a few banana, citrus, and pineapple plants. Some farmers said they prefer to rent a truck from a rich neighbor and sell their produce in Baguio, than to rely on traders at their farm-gate.

We drove down newly opened barangay roads; one of these had been upgrade from little more than a trail. We learned about farmers who were known to load their produce on their backs and walk several km to the nearest road as a means for bringing their crops to market. With my interest in "penetration roads," I guessed at the "zone of influence," which I planned to use in estimating the benefits of HADP's construction of *new* roads. For *improvements* to existing barangay roads I planned on using traffic counts. A local official who joined us for awhile told about HADP's difficulty in gaining rights-of-way for some of the barangay roads. In one case a farmer caused a delay because a proposed new road would pass through his property. He didn't want to lose his hundred square meters of bell peppers already planted. Ron explained that HADP should have reconciled farmers' interests with the "greater good."

We visited members of two multipurpose coops, a credit coop for potato farmers, a municipal coop, an irrigation coop with 2,500 members, and a large coop with locations in nine barangays. I began to wonder why Haider was paying so much attention to coops, then figured that coops were part of HADP's focus on "services."

We met with two women's group, one in a large room of the municipal building, the other in a small shack alongside a path in a green pasture. We asked about their involvement in "women's activities" and the Revolving Fund in Kind (RFK). They agreed among themselves

that they generally felt on a par with men when it comes to working in the field and making family decisions. One of them said that she is as capable in using the back-slanting hoe as any man. And she looked it! Given their direct involvement in farming we asked how much time was left to participate in women's organizations. Not much was their answer, which didn't seem to bother them. When we asked about the RFK program they said that farmers liked receiving the funds. Problems arose when the participating farmers did not understand the program. They had received flood relief in the past, which not having to be repaid, considered as a "gift from the Government." But, RFK was different. Repayment was needed to keep the Fund going. When this did not happen, the pool of funds dried up and the Government refused to contribute more. Ron considered the RFK experiment a failure.

We considered our meetings with mayors and vice-mayors of the municipalities and towns was an act of courtesy, as well as a source of information. They were not only gracious with their time; occasionally treating us to lunch and even dinner. And when they weren't available they arranged for one or more of their staff to accompany us during our visits in their areas. None of them made us feel as though we were an imposition. This could have been due to their appreciation for what HADP had done for them, or possibly in anticipation of how they might benefit from CHARM. In passing, they told us of the difficulties they were having adjusting to the 1991 law that transferred funds from the national government to the provinces, municipalities, and barangay governments, which they called *devolution*. The adjustment proved difficult and the gestation period long, in terms of planning, financial management, and technical requirements. It is not uncommon for them to still look to Manila for help and advice. Earlier Ron he had suggested we invite these officials to our debriefing meetings as a way of bringing them on board.

Towards the end of our second day we finally got to look at irrigation, which along with roads, was the other productive thrust of HADP. At one irrigation site we reached the top of a hill amidst a large area of irrigated cabbages and potatoes. There we saw six thousand gallon tanks that received water via 4 cm galvanized steel pipe fed by a mountain creek four km away.

Gate valves control the flow of water to the farmers' sites. At these points each farmer applies the water by means of nozzles at the end of flexible hoses. I thought this *has to be labor intensive!* But, then these are small plots. How different from the dammed reservoirs and long irrigation ditches in Peru, or the giant irrigation schemes of Pakistan and the Nile. But here, irrigation is used mainly to grow a third crop during the dry season. As we drove to the next irrigation site I saw a small pipe in a ditch by the side of the road. Ron told us to turn in at a farm gate, and there adjacent to the road we saw a farmer-rigged array of Rain Bird sprinklers throwing 360° arcs of water with a radius of some five meters. I surmised that this was the destination of the water being conveyed in the pipe we had seen next to the road. Later, another farmer said he was seeking financial help from the municipality to buy 500 meters of 2 cm plastic pipe hoping he would *somehow* find the money to repay the loan. I thought to myself, is he another one of those who feels government money does not have to be repaid?

Further on Ron had arranged for us to visit another demonstration area. As we neared the location I saw a modest farm house situation close to the road with its owner standing in the doorway. Ron had previously contacted him earlier about our planned visit. He invited us to look around while the women, who looked on from inside the house, began preparing lunch for us. Except for the flat area around the house, the land sloped steeply downward. Getting out of our vehicle to look around I could see that, if it weren't for the terraces and trees, one could roll or slide a long, long way. Citrus, coffee, passion fruit seedlings from demo were on sale to the public. Edy told me that the system looked pretty good, but that the edge of the narrow terrace should have been planted with a perennial legume whose roots would stabilize the soil while proving nitrogen to the trees. The farmer was a tall, good looking Filipino, slender, and confident looking. He said he that had a university degree and taught in the local secondary school. After "sizing me up" he asked me if I had ever eaten Pinik-pikan chicken. Below, is his story:

Pinikpikan, "killing me softly chicken." is something reserved for special occasions. It is a chicken which has been beaten with a stick whilst still alive, it is then

killed butchered and cooked. It is claimed that beating the chicken whilst alive bruises the skin therefore bringing blood to the surface and thus improving the taste of the chicken. The occasion follows with the chicken being shared amongst the guests. The youngest girl gets the wing, the youngest boy gets the leg, the oldest man receives the head, and the eldest women... the chicken bum (a prized part of the chicken because it has only has one!) We weren't around when the "killing me softly" part was happening, but I did see the plucked chicken in a thin blue plastic bag, and it was a sight to behold. I felt horrible for having been the reason that an animal had to go through any kind of pain. The killing had been done, and the only thing I could do was eat the poor bugger. I kept telling myself it's tradition, it's tradition and that the foie gras I've had in the past is no difference. The taste was meatier then regular chicken.

In a way, I thought, this couldn't be worse than eating dog, which I had heard happens in some parts of the Philippines. Was our host putting me on? I didn't know.

After we left the well-prepared meal (no chicken) our gracious hosts had prepared for us, I wondered about this program. At one of our visits we noted the very small plots of land intended as demonstrations of steep-slope conservation. In this case the plots were a mere 15 sq meters! The participating farmer said he had eventually opted out of the experiment because the little compensation from the fruit he could sell was not worth the effort. Besides this difficulty I wondered if any effort to promoted farming on such steep slopes was worthwhile.

Back in Baguio at the end of our second day we stopped at he CHARM office to drop off Ron and the enumerators. He invited me into his office to meet some of those who hadn't accompanied us on our trips. While waiting I note a chart on a wall that showing production levels for potatoes, cabbage, carrots, beans, tomatoes, sweet pea, and Chinese cabbage, nearly the same list I already had. Soon Carmen, Ulysses, and Charles introduced themselves and said they would accompany us tomorrow on our trip to northeastern Benquet Province. Then I talked with Nancy, one of CHARM's enumerators. Going over one of her reports I noted she had

forgotten to show the number of days family members worked on individual crops, and asked her to write in estimate of these amounts. What a dope I was! If she hadn't gotten that information on-site, she should wait until she returns there, or in some other way. Certainly not to record the information now. In the office! That reminded me of stories about enumerators who, not being closely supervised, might find some shady spot to fill out the questionnaires without interviewing a single farmer. Before leaving, I told Ron that I had heard little about agro-industry during our trips. He acknowledged that they had paid little attention in this regard; but did say some thought had been given to establishing a small potato-chip plant. It was 6:30 by the time we returned to Camp John Hay. It had been another long day in the field.

We checked out early the next morning and headed north where we would spend five days in Mountain Province. Several of Ron's staff accompanied us; so many in fact, that we formed a four-car convoy as we left Baguio. I knew that HADP had worked in Mountain Province as well as in Benguet. But I wondered how much more we could learn. We had met with dozens of farmers and government officials, and we had talked with members of several coops and women's groups, as well as looking at many irrigated areas, roads, and farmers' fields. Just how much more was their to learn, other than to confirm and embellish what we had already learned. Was it really necessary to spend five more days at this? As far as I could tell, we were on a *random walk* going from one place to another without a logical plan. I had already filled a notebook with data, yet wasn't sure how I would use what I had gathered. In the few times I expressed my concern with Haider he didn't have an answer. Or was it he felt I didn't need to know? Rene didn't help; he seemed to be in lock-step with Haider. Edy didn't seem to have a problem as he focused on environmental factors and knew what data he needed to collect. Although frustrated I calmed down because I was soon to find our trip interesting.

On one of our visits Carmen, Ida, Ulysses, and I walked down a long, sloping road to look at an irrigated area. At the bottom we located the mouth of a wide box culvert, which was carrying water about 20 cm deep that flowed into the small channels leading to the fields.

Apparently this volume of water was sufficient because the fields were green with healthy

looking crops. Soon we had seen enough and began a leisurely walk back up the hill talking about what we had seen. Then, I asked if what Rene had said about rebels being in this area was true, since I had thought they were active in the islands south of Manila. Not so, Ulysses said. They had also been in this area. They could be among us now, but you wouldn't know it. Then Carmen told us that she had been one of them. I took a second look at this nice-looking young lady with a open, pleasant smile. She was about 5'-2", athletic while not being mannish, probably in her early twenties. She didn't fit the picture. Then, she told her story. She had been put off by the Government's ineffectiveness and wanted to do something to help the poor. But after a few years she grew sick of the bloodshed, figuring there must be a better way. So, she went back to school, earned a BS in economics and a MS in Business Administration, and joined HADP as a community organizer. Demonstrating the *toughness* of a rebel, I learned that she had walked half a day to help those in an area devastated by a typhoon, stayed a week, then with her job finished she walked back out. During our discussion Ulysses, an M&E specialist, told us that he had recently earned a master's in Economic Development. Interesting stuff!

Just as interesting was the story by a woman we met while the same four of us were on another walk through the country side. This one through a forest of widely spaced pine and closely cropped grass. We saw her as she was getting out of a Ford Fiera parked in the driveway in front of a two-story farm house. The building was neither presumptuous nor a hovel, but one that belonged to a successful farmer. She looked to be in her early forties. Sometimes it helps to have women along because Ida and Carmen approached her, told why we were in the area, and asked if we might ask some questions. She quickly agreed. This was what we learned. Her name was Caroline Baybay. The area around us is their farm, she is married, the mother of six children, and has a BS in forestry from the Univ of La Trinidad. Her husband has an engineering degree from the Univ of Baguio. He had inherited 1.6 ha of good farm land as an ancestral right. After working as an engineer for some time, he figured he could make more money farming. Knowing that we were evaluating HADP's performance she said that the family had gained a lot from the program. They appreciated getting access to irrigation water, receiving seedlings for their 0.8 ha orchard, and participating in the agricultural training

March her husband had received five days of training on biological and mechanical control of pests. They and neighboring farmers are anxious to adopt new technologies. Besides citrus, they grow mostly tomatoes and bell peppers, which they sell locally; and they raise pigs. They are members of a farmers' coop. She does not belong to any women's group, adding that taking care of their six children and her farming tasks keep her busy enough. Expanding, she said that the pigs are her responsibility; and that she helps weed, plant, and harvest the crops. She and her husband make decisions jointly. Finally, we thanked her for spending so much time with us. Walking away we agreed that this was one successful family. But, then, how many farm families are there with access to ancestral land and have university degrees like these two?

Another time we drove to the top of a rise where we marveled at the broad expanses of cabbages and potatoes that extended as far as the eye could see. Sensing my concern about such concentrations Ron said that the *diadegma* has solved the diamond back moth problem and that the seed potato program has helped by being able to bring in different varieties. Prices have been stable because of the large, readily accessible market in Manila. Still, I thought such concentrations *must* be risky. One day while looking over other large fields of vegetables, I was shocked to hear a bird singing. I suddenly realized that during this trip up north I hadn't heard a single bird singing until just now, which brought to mind Rachael Carson's *Silent Spring*. Was this what she was talking about? Probably was, because of the widespread application on pesticides in this vast vegetable producing region.

That night we stayed at a two-story clapboard hotel in a small mountain village in Mountain Province. I was not surprised by the dimly lit desk where we signed in because it matched the exterior. My room was chilly and was told the toilet and shower were at the end of the hall, and that the power was off "temporarily," which explained the lack of heat but also meant that I could not recharge my computer's battery. The dining room where we went to eat was large, dark, and empty. Except for Haider, Rene, Edy, and I we were the only ones to be served. Suddenly I realized how off the beaten track we were. I was awakened in the middle of

the night when the power was restored and the lights in my room came on. There was something about the place that reminded me of *The Shining*. However, things looked much better in the morning when I went in for breakfast. It was the same place as where we had eaten last night. But now, the sun was shining through the large expanse of windows overlooking a mountain side, and I could hear the disk jockey on the radio speaking perfect English and playing country music popular in the States. My thoughts about this place took a big uptake and I marveled at this remote area so far from the States yet with so many features reminding me of home. In all my travels I had never been to a place quite like this. Were the Filipinos resentful of the US occupation? Possibly, but not obviously so.

The next morning we drove to central Mountain Province where we checked into Mount Data Lodge, which would be our headquarters for the next four days. This secluded lodge was situated in a pine forest, 2.300 m above sea level; the lodge itself was pleasantly rustic, the large windows of its small dining room looked out on pleasant surroundings, and a large centrally located hearth bordered by two rows of easy chairs encouraged one to have a drink, converse, and warm up from the chilly air. Besides ourselves few guests were staying here. But the lighting in my room was dim making it difficult for me to work and the shower lacked hot water, which forced me to take "baths" out of the bucket of hot water management provided me.

Because of the frequent heavy rains from typhoons, which arrived early, I stayed at the Lodge summarizing my notes and preparing the *Aide Memoire* that Haider had asked me to write. Besides, I had seen enough of the countryside and needed to begin writing. The *Memoire* was to cover my summary of what we had found and would also serve as my consultant's report. Because my room was an inconvenient place to work, I sought out a corner at the edge of the restaurant that gave good light and little distraction. Around noon of our first day here, four of Haider's four enumerators checked into the Lodge. He had hired them to collect crop budgeting data from irrigation farmers. That gave me the opportunity to find out more about farming practices, marketing, and other topics relevant to our evaluation. By the time we left I had produced a draft of the *Memoire* with the following headings: Investigative Design, Project

Results, Operational Performance, Institutional Development, Financial Performance, Economic and Financial Re-evaluation, Women in Development, Environmental Impact and Control, Key Issues for the Future, Overall Assessment, Lessons Learned, and Follow-up Action.

While I was so engaged, Haider continued his field investigations. Then it dawned on me that we, at least I, had been spending so much time learning about the farmers' current situation and precious little time on what farmers' conditions were like *before* HADP. Apparently my comment to him hit home because the next day Haider and two enumerators returned to the field to find out. What he did was to ask farmers to *think back* to the time before HADP. What were conditions like then and how have they improved? Not a very satisfactory approach. At best this represents the *before vs after* approach not M&E with its *randomly selected controls* needed for *with vs without* comparisons. But this was about all we could do at this stage of our study. When Haider and the others returned for the day the enumerators told about Haider walking on top of a narrow concrete irrigation structure, like a bridge, attached to a shear wall with a 30 meter drop below. They marveled at his bravery, and so did I. Just writing about it gives me the shudders.

We spent the final two days of this field trip in Baguio meeting with Ron and his CHARM team. Ron was interested in what were our conclusions. For example, how far along are we in estimating the Economic and Financial IRRs, as required by ADB? We in turn wanted his comments for our section on Findings and Conclusions. He said nearly all highland areas have some access to irrigation water. Potatoes are the most widespread rain-fed crop; cabbages require lots of water; the seed potato storage program has facilitated the introduction of varieties from abroad; and the provinces still look to Manila for help and advice regarding the agricultural research.

The following day we traveled to the National Irrigation Administration headquarters close to Baguio for our debriefing with NEDA. This closed the circle since the first day of our field trip began with the meeting with this organization. About 40 from several organizations

attended. Anticipating the meeting Haider was well prepared and talked at length in his usual comfortable manner. While the group listened intently, I thought much of what he said was the same ol' boiler plate I had heard before. Missing was the framework for our evaluation, any reference to M&E, important findings, and our preliminary conclusions about the project's success in terms of economic, financial, and social performances. A NEDA spokesman wanted to know what we had found regarding poverty reduction. Haider dodged the question by saying sustainability is important. Ron stepped in to say vegetable farmers have benefitted greatly, but rice farmers, who are poor, haven't. After a few perfunctory questions and responses we broke for a lunch of noddles and highly spiced chicken, a dish I had had before and liked.

After lunch the meeting focused less on an evaluation of our mission and more as an opportunity for those present to talk about their activities. The representative from Public Works and Highways said that his organization expected to maintain barangay roads for two years after built or improved, then local organization must take over. An Extension agent told how his organization is coping with the transfer of program responsibilities from the national to the regional governments and the agents' low salaries need to be addressed. A community worker talked about their training programs in leadership, finance, system operations, and motivation. At this point I ceased taking notes.

By now I had mellowed, ceasing to fret over the way we were doing things. With only 15 days left on this assignment I planned to quickly finalize the *Memoire* then turn to calculating the project's EIRR and FIRR. But before starting on these estimates I wanted to study ADB's *Guidelines for the Preparation of Project Performance Reports*, the *Loan Agreement* between the GOP's Ministry of Finance and ADB, and completed *Project Performance Reports* as examples of what is needed.

In reviewing the Loan Agreement I found an entire section on M&E. Turning to ADB's *Guidelines* I found a paragraph recognizing this loan obligation. And hadn't Haider's visit to CSU sought advice on how ADB might improve its approach to M&E? I should have raised the

subject during the first few days of my consultancy here, but I didn't. Instead, I kept waiting for Haider to some show some evidence of its existence. When we hooked up with the enumerators at the Mount Data Lodge, I thought perhaps the data they were providing came from such a scheme; and later, when I went to Rene for data on the benefits of irrigation and roads, I thought his source might be M&E records. But as days passed, I suspected that Rene and Haider were simply relying on data from past project performance reports. Apparently ADB was reneging on its M&E obligations without Haider knowing it. Nor had Ron, who seemed so knowledgeable, say anything to me about M&E. So, with no firm data on HADP's accomplishments, our performance report became little more than a feasibility study in which activities are "best estimates."

Next, I returned to the *Guidelines* for the details of its B-C methodology. I had casually noted the approach while in Fort Collins. Now, I was responsible for applying this methodology. Before long, I realized that the Bank's approach followed that of the World Bank, which in turn was based on methods developed by Little and Mirrlees, as Colin Bruce and I had discussed while he was with the Ethiopian Planning Commission. Colin and I had even thought of jointly producing a set of guidelines of our own. But, for whatever reason we never pursued the idea. In any case, I was familiar with the L-M approach in general, if not in detail. Those were my thoughts at the time. But now after having applied ADB's required method I find it both less demanding and more rational than I had thought. The basic factors in an analysis were the World Bank's index for the Manufacturing Unit Value, recent past and projected prices of internationally traded commodities, the country's Wholesale Price Index, and ADB's use of an 80% *conversion factor* for discounting local prices. Note: this *conversion factor* accomplishes the same purpose as the foreign exchange *premium of 25%* that I have often used.

Having thought through the issued of M&E and Methodology, I next turned to the project itself. I concluded that *improved* roads and irrigation are *independent* components and should be analyzed separately; and that *new roads and irrigation are complementary* and should be analyzed as a package. To clarify: these barangay roads serve the whole region, not just

irrigation. And, because changes in vehicle usage can be counted, the standard approach used in the States and elsewhere can also be applied here. True, no traffic counts were available; but, they can be estimated from the sort of ad hoc counts I had made during our travels. On the other hand, there is no basis for estimating what the traffic would be in new areas because the roads do not yet exist. So, investments in road and irrigation should be combined, and the benefits confined to the value of increased vegetable production alone. The third component of HADP are investments in *agricultural services*, i.e, research, extension, marketing, diadegma, seed potato storage, soil conservation, loading platforms, and the revolving fund in-kind. The first five of these *support* irrigation farmers benefitting from HADP; but some outside the project benefit as well. How much? We could not tell from the data we had collected. So, I *assumed* that only 50

percent of the investment and operating costs ought to be charged as a cost of the increased value of irrigated crops and the remaining costs attributed to others outside the project without attempting to estimate the value of these benefits. We found that most of soil conservation, along with its investment in nurseries, was taking place beyond the irrigated areas. Because the benefits of this investment are for the most part are long-term and separate from irrigation or roads, it ought to be considered in a separate calculation. Because this is a complex task, I suggested that the cost of this activity should not be included in our calculations. Finally, because the platforms and the revolving fund were failures, their costs should be excluded from our EIRR and FIRR estimates. It was this part of our analysis that I thought so far important to get right, than the marginal adjustments suggested by either the L-M or the Tinbergen approaches.

There was yet one more task I wanted to finish before my departure on June 13th. That was to consolidate the net revenues for irrigated vegetables and the vehicle mix for the roads component. Using budget data from Haider I combined values for the five most prevalent crops, aside from rice, into a weighted representative figure, as follows: 35% each for potatoes and cabbage and 10% each for carrots, beans, and *womboc*. For roads, I combined vehicle type: passenger cars and jeeps, jeepneys, small buses, large buses, pickups, 2-axle trucks, and 3-axle trucks into a weighted composite to be used in estimates savings in operating cost from road

improvement, or the operating costs for the new roads associated with net benefits from the *zones of influence*. By the time I departed the Philippines I had produced 14 large tables, with explanatory notes, that would allow me to estimate the EIRR and FIRR once I returned home. These two estimates would be made in the usual way: by entering year-by-year values for investments, operating costs, and benefits, discounted to present values, which through interpolation, produces the internal rates of return. The usual stuff.

Over these last two weeks I spent about an equal amount of time at the Bank and "holed up" in my hotel room. Concurrently Haider and Rene were working on their part of the analysis: Rene on investment and operating costs and Haider focused on the crop budgets (yields, material inputs, labor, costs, farm-gate prices, and net returns)—something he said he felt comfortable doing. He and I had our differences over cropping intensity.³ He told me to us 300 percent. That is *all farmers benefitting* from HADP would reach this ideal level, which I thought was unrealistic. Certainly something prevents this "perfect" level because harvesting delays might prevent planting the followup crop in time, labor shortages or lack of credit at critical times could do the same thing, or farmers might want to fallow alternative pieces of land. Something often gets in the way. Ron told me that CHARM used an intensity of 240 percent, a figure I would have preferred using. But Haider remained adamant, so I deferred to him because he was the boss.

Most of the time I stayed close to the hotel. I made use of the hotel's breakfast buffet as both good and quick. One morning I was surprised to see Dave Seckler sitting close o me. He was there with a group from the International Food Policy Research Institute. He said he thought it was ten years since we had last seen each other. He was close because we had met in London and again in Sana'a while planning the project Yemen, but five years ago we saw each other in Jakarta. So what? Several times Haider asked me to join him for lunch at his favorite Korean restaurant, once he invited me to the Bank's executive dining room for lunch, another

³ The number of crops on a piece of land for the year.

time he treated me to lunch at a luxury hotel in the center of town, and once he invited me to dinner at his home. By now our relationship had become amiable, as at the start. Otherwise, in the evenings when I wanted a quick meal I would walk directly to the adjoining mall without having to leave the building. There I would find many of the popular chains, such as McDonald's, Jimmy Dean's, or Long John Silver. Other times I would snack in my room. Time rapidly slipped by during the last several days, producing the pressure I often felt at the end of an assignment. I worked late, slept fitfully, dreamed about what needed to be done, and woke up before dawn. The same ol' story. I worked straight through the last night, then showered to wake myself up so that I was ready when Haider knocked on the door for a short debriefing. All went smoothly until he asked if I had copied the files in Excell, rather than in Lotus, something I had promised but forgot to do. He said that the Bank could not access Lotus files, which I found strange but said nothing. After a few tense moments we agreed that I would copy the files into Excell and Fed-Ex them to him after I arrived back home.

That finished, I checked out of my room, waited for an ADB driver to take me to the airport. I had a serene feeling as I rode through an attractive residential area then past a US military base on the edge of town. At the airport I waited in United's VIP lounge, a privilege of flying Business Class.

The layover in Seoul was short and my direct flight to SF was pleasant. I slept a good part of the way, had no problem clearing customs, and before I knew it I was back in Ft Collins, Vicky waiting for me with a big smile and open arms. In relating my experiences I told her that this had been one of my better assignments--being able to spend so much time in the mountainous "back country," one so picturesque and different with so many interesting and cordial people; and I had been challenged by having to learn and apply the L-M method, which I found better than the method I had used for so long.

After taking a few days to adjust to the local time and to put things in order, I returned to the files I had promised Haider. Over the next nine days I reworked the vegetables and rice

budgets, roads, and three imported fertilizers; and I produced the tables that gave an EIRR 18.6 percent and an FIRR of 15.5 percent. Although the EIRR was in line with the value anticipated in the project paper, which was comforting, I suspected it as being high because of the 300% cropping intensity that Haider had insisted on using. In the process of producing all this, I reread the previous appraisal report on HADP and realized I had goofed. In calculating the EIRR I had used the *combined* values for irrigation and roads, instead of evaluating them *separately* as I had stressed in my "instructions" to Haider. So, I made the calculation for vegetables and rice and came up with an a value of 47%, which didn't surprising given the expected low value for roads. But when I tried to calculate the EIRR for roads something strange happened: regardless of the discount value I chose the NPW kept coming out negative, which simply meant that *costs exceeded benefits*. No rational *investor* puts money in a scheme that *loses money!* The important word here is *investor*. Governments and welfare organizations allocate resources to charitable groups in the name of welfare. But here we're talking about EIRR and FIRR, which apply to investments. This conundrum bothered me for awhile. But in the end it didn't matter.

By June 25th I had "Fed Ex'd" Haider all of the diskettes containing these files, along with explanatory notes, that required as much work as the material I had given Haider before leaving Manila. With that I thought my job finished. But a month later Haider was back in Boulder for a couple of weeks. He said that a preliminary version of the Final Appraisal Report had been completed two weeks ago. He wondered if I would be available to return to Manila in a month or so–something I had agreed to do if I were available. Nothing came of it.

Epilogue

Nearly a year later Tom Sheng told me that Haider had quit ADB and was back in town. He said that Haider planned on taking courses in environmental economics at the Univ of Colorado. A month later Haider and I talked on the phone for over an hour. He said his boss's "underlings" were attacking our report. He wanted me to write a rejoinder that he would fax to ADB in two days. I said I'd try, but I needed to see the report. "Fine," he said, "I'll get it

to you right away." When I read it I was *shocked* to see that the estimated EIRR was only 8.8%, not my figure of 18.6%. I called him to say that he shouldn't have changed the EIRR without talking to me first. After all, my name was on the document along with his. I said I wouldn't be able to meet the deadline, that we needed to talk. He sounded offended, saying that Tim Hutton, ADB's roads specialist, said I had "double-counted" the benefits. And *that put me off.* I told him that my PhD was about the evaluation of roads in countries similar to the Philippines. *I wouldn't make such a mistake!* Before hanging up he said, "I knew it was a mistake asking you for help!" That was the last time we talked.

A little shaken, I looked at the report more closely. To my surprise I found that he had set just irrigation benefits against *all project costs*, i.e, those for roads, and agricultural services, as well as irrigation. No wonder the EIRR had plummeted. Yet, roads and agricultural services benefit others besides HADP's irrigation farmers. These barangay roads are similar to our rural roads, which are used for many more purposes than just the farm-and- market traffic. I had gone to some length in describing this to Haider, but apparently he didn't get it. His benefit-cost analysis simply did not match reality. As I had written earlier in this chapter, the most important part of project analysis was to get this reality right--much more important than the "tweaks" associated with conversion factors or shadow prices.

Haider *simply did not know what he was doing*. In a way I was not surprised. He hadn't mastered ADB's economic analysis procedures, otherwise he wouldn't have asked me about the World Bank's MUV⁴ index. I was shocked when he, a PhD economist, said he didn't know how to normalize for inflation. Nor had he mentioned that our evaluation was supposed to be based on M&E. Thinking back, another clue was his statement that his main job was *managing consultants*. Yet, his title at ADB was *evaluation specialist*. I concluded that he was not be a *numbers guy*. Some economists aren't. But then why was he hired as an evaluation specialist?

⁴ Manufacturers Unit Value, a proxy for the price of developing country imports of manufacturers in US Dollars to access cost escalation for imported goods, and similar to the shadow price for foreign exchange that I have used.

Was he relying on his father's reputation at ADB? Becoming curious, I checked out his 1982 dissertation from the CSU library; it's title: *The Impact of Egyptian Agricultural Policies on Farm Income and Resource Use.* He applied a linear programming model for the optimization of crops grown by Egyptian farmers. His data came from CSU's Egyptian Water Users Project: the same project in which I had been involved. His major profession was Mel Skold whom I knew and respected. Now I knew why he had said that he was comfortable doing the crop budgets for our report. His sole justification for his optimization model was that it had been used by the Control Data Corporation; yet, CDC is more into hardware than software. Checking my text for the operations research course I took at Stanford, I noted that linear programming is suitable only when values are *proportional, additive, divisible, and deterministic.* Yet he hadn't addressed these restrictions. I was surprised that Skold let him get away with this.

At one point following 9/11 I heard that his Afghan family was well-connected and that he might be appointed that country's ambassador to Egypt. Not too far fetched since his oldest brother was ambassador to Poland. Recently when I asked Tom about Haider's whereabouts he said that he had gone into real estate in Boulder, prospered, expanded and moved to California, but eventually went bankrupt. No disgrace in today's economy. Too bad, for I liked the guy and he treated me well. It was just that he was over his head as an evaluation specialist.

Chapter 24: Indonesia Revisited

The fall of '97 after my return from the Philippines Vicky and I took an extended road trip back East to see friends and family. Our first stop was in Hot Springs Village, near Little Rock, to spend a few days with Glen Anderson and Mary Downing. After a misguided attempt at a shortcut we eventually got back on the right track and headed to Marcos Island on the southwest coast of Florida where we spent several days with George, Lee, and their kids. Then, straight up the coast to Columbia to visit Becky's family and to see our youngest grandson, Michael, born two days earlier. During our week there Tom Remington and his wife came for dinner. Our last destination was with Tim and Tammy in Louisville. Tim was in he process of finding a university with suitable credentials in poetics that would offer him a scholarship. During our three-day visit we went to the races at Churchill Downs where we neither bet much nor lost much. Nothing exciting about the two-day trip home, except as we approach Longmont we saw dozens of vehicles in the ditch due to the snowstorm that had just preceded us.

While Vicky and I were staying with Becky and family, I called CSU to see if I had any messages and was told that Merle Niehaus wanted to get in touch with me. When I called Merle, he said that Sam Johnson, now at CID Headquarters in Tucson, wanted me to call him. When I did, he said that CID was looking for someone to fill an assignment in Jakarta and my name had come up. The project, funded by ADB, was an Assessment of Options for Sustainable Irrigation in Indonesia. Was I interested? I was if the fit was right. It sounded like my assessment there previously. Vicky and I enjoyed this country beautiful and found the people pleasant. Sam said CID was looking for someone to carry on for an assignment begun by Bob Varley, who couldn't finished because of family problems. Filling in for him brought me up short. He had written a definitive report, *Irrigation Issues and Policy in Indonesia*, that I had depended on while writing my report as part of Nobe's team. During this time I came to learn

¹ Sam and I had kept in contact since he had earned his PhD in economics at CSU because of our mutual interest in development.

the extent to which the Indonesian Government depended on a cadre of international consultants whose specialty was Indonesia: their contacts with high-level government officials were extensive, they knew the country, its problems and opportunities, its five-year development plans, and, critically, they knew the language. The latter had been a real disadvantage for me because many of the government documents were in Bahasa, the country's *lingua franca*. While there I had experienced a subtle prejudice against "outsiders," Early, Robby, Johnson, and Ramchand being among them. When I expressed my reservations, Sam said that I shouldn't be concerned, that several within the ministry where I would be working were CSU graduates. One of the PhDs had even taken my Projects Course.

Ramchand Oad was already in Jakarta as team leader. He was a short, swarthy Hindu who had immigrated to the USA from Pakistan. I knew Ramchand when we were both part of the Water Management Synthesis project and welcomed the opportunity to get to know him better. What he wanted from me was a review of past activities in water management and where to go over the next ten years, which included benefit-cost analysis, suggestions on agricultural policy, and looking into the "rice balance." Benefit-cost analysis would be no problem; I thought I could handle policy as it relates to water management based on my earlier work there for the World Bank; and looking into the rice balance didn't seem particularly difficult. On the other hand the timing was tight. Vicky and I were due back home on Nov 11th and they wanted me *in Jakarta* by the 21st. As it turned out, I couldn't make it by then because of the paperwork on their side. But Vicky and I did arrive in Jakarta on the 26th.

Two days earlier, we flew to Los Angeles *first class*, and business class all the way to Jakarta with a stop in Seoul, an overnight at the Amari Hotel in Bangkok, and another stop in Singapore. This was becoming familiar territory for me–at least the airports were; and I had grown to like the easy access to the Amari, which was adjacent to the airport. Ramchand's driver, met us and drove us to the Kristal Hotel, where Robby was staying. It was 6:00 p.m. when we briefly met Ramchand and Robby there. This had been a long trip: Denver to LA was two hrs, LA to Seoul 13 hrs, Seoul to Bangkok 5 hrs, and Bangkok to Jakarta another 2 hrs.

That's a full day in-flight. We slept well in Bangkok and the "luxury" conditions made the flight enjoyable. At times when I have been traveling for so long I'm almost hesitant to leave *my cocoon* in the plane. By crossing the international dateline we had lost a day. Ramchand and Robby were sensitive enough to leave us to ourselves after their brief welcome. But Robby did say that I could meet him at 7:00 tomorrow morning if I felt like going to the office.

The Kristal was a delightful hotel set in a residential area not far from the International School. This was not one of the tourist hotels like the Hilton, but just a comfortable place with lots of the right things, about 200 nicely appointed rooms, large swimming pool surrounded on two sides by grassed areas, walkways, pool-side area for snacks and drinks, a fine restaurant, and, above all, a large lounge that featured a full-circle bar with a dance area and a cozy corner where Vicky and I would frequent for drinks, soup, and sandwiches. Our room with its king-sized bed, a couch, a desk and a straight-back chair where I could work, and a kitchenette with a frig and a place to eat. Just behind the hotel was the Hero Supermarket. At first we thought this to be a Mom & Pop shop, but later learned that it was part of the nation's largest supermarket chain.

Our five-mile ride to the office during this time of day took less than 30 minutes. Later in the day it took much longer to navigate the busy Jakarta traffic. Somewhat to my surprise when we drove to the entrance of the Public Works building I learned that our office in this ramshackle building was on the floor just above where I had worked on my previous assignment here. But this time, instead of a narrow, cramped office, ours was a large bullpen where I and five others would work. Ramchand and the project secretary had a small cubicle at each end. Robby directed me to Ramchand's office then left for his office down the hallway. Inside, I was surprised to see Terry Podmore. He was here to look into the transmigration scheme involving millions of hectares. We talked for awhile then Ramchand introduced me to other members of the team: Masyhuri with a PhD in ag economist who was my counterpart; Gunawan Widjaja, Irrigation Engineer and O&M specialist who was Ramchand's counterpart, Yaya who was Terry's counterpart, and Ade Kartini, secretary and accountant.

That done, I took a moment to talk with Masyhuri, since I would be depending on him to help me continue what Varley had begun. He looked to be in his late thirties, was small and soft spoken. I had to pry information from him; but I did get quite a lot, including a document Varley had written before he left. I recall relying on one of Varley's reports during my previous assignment in Indonesia. Later, Ramchand gave me the team's Inception Report.

I learned that Ramchand's driver stays with him, which means that I had to find my own way back to the hotel. Robby described how to get home. After leaving the office I should walk to the boulevard nearby and signal for a taxi, which wasn't as easy as I thought it would be. After half a dozen tries, one finally stopped. Because of the heavy traffic, the trip took twice as long as it took in the morning. That evening, Vicky I looked into the Pub as an alternative to the rather fancy restaurant, finding it to our liking, so much so, that we seldom went anywhere else.

This was to be an "office" assignment with no need to go to the field. It meant bringing myself up to speed on what had occurred during the previous four months, reading numerous reports, and contributing to the team's mid-term report due next month. It was just back and forth between the Kristal and the office for the next eight weeks. I spent the first week trying to figure out what to do.

I began by reading Roche's ADB report justifying this project, which looked at Indonesia's accomplishments of the most recent five years. Interestingly, my previous Indonesian assignment had the same purpose for the previous five year development plan. In local jargon these was REPELITA V and REPELITA VI. In the earlier assignment, Ken Nobe had clearly stated what I was to accomplish; this time, Ramchand was having trouble deciding what it was he wanted me to do. So, he suggested I read Roche's report and if I still had questions I should read the team's Inception Report, prepared last July.

My reaction to the Roche report was that it was a mishmash of topics: no logical sequence that led from the most important topics to supporting topics. It intermingled topics

such as trend self-sufficiency in rice, non-rice crops (*palawija*), imports, exports and social welfare, O&M, Turn Over of irrigation systems to local organizations, Irrigation Service Fees, Water Users' Associations, surveys to obtain primary data, M&E, transmigration to swampy areas, oh just a lot of things. Reminded me of some of the AID terms of reference that were so sweeping that no consultant could hope to accomplish what was being asked. I had cut though this fog of expectations in Peru when Rollo Erich was my contact, and in Ethiopia when I was able to convince Kari Egge that the expansive baseline survey was not needed for an M&E approach.

Looking at the Inception Report, I found that the number of topics assigned to Varley doubled those assigned to Robby and Ramchand combined. Clearly, Varley had a key role, at least in the number of topics to consider. But, I found no basis for what should be done initially. Fine! I'll look to Varley's report, expecting to find an account of what he, with Masyhuri's help, had accomplished during the subsequent four months and instructions on what Masyhuri should do after Varley's departure. But, I couldn't believe what I read. The single, undated report, which Masyhuri had suggested I read, carried the first-page title: Some Background and Things that Don't Fit Elsewhere. Strange, I thought, but I continued to read this 34-pg report. The subsequent headings were Strategy and Planning for Irrigated Agriculture, Policy Framework and Strategy for the Long-Term Program-II, Preparation and Implementation of Irrigation Projects, Irrigation O&M and Financing and Performance, Land Development, Technology Adoption and Agricultural Support Services, and Markets. I didn't know what to make of this report, whether it had been written at the outset of Varley's assignment based on his extensive knowledge from an earlier assignments here, or just before he left. One key was his statement, "A sensible strategy for ADB Technical Assistance may be to consciously limit itself to what it has some chance of achieving-elaborating the options for improving O&M in terms of solutions for different categories of irrigation systems." That sounds like advice at the beginning of Varley's assignment. Neither Ramchand nor Masyhuri knew which. Ramchand looked worried, unsure of what I should do. Eventually, he said that I should begin by focusing on policy issues and an implementation strategy. But I countered, "First, the analysis should

provide one with an understanding of the system and what ought to be done, with policies flowing out of that." Ramchand seemed not to know what I was supposed to do, and Masyhuri didn't seem to care. With a doctorate in economics he was bright enough and had the tools but something must have turned him off.

Reading these requirements reminded me of some of USAID's demands of its consultants. My experience in dealing with such diverse and sometimes conflicting requirements was to plunge ahead doing as best I could within the time available. So, lacking clear direction, I begin reading what Ramchand thought were some of the relevant documents. These included Strategy Reviews by the Ministry of Agriculture. a Japanese study about Irrigation in Indonesia, Repelita VI, a 1992 report by Tabor and Seckler on Indonesian Rice Policy, A Food Balance for Indonesia, the World Bank's Staff Appraisal report for Agricultural Development in 1991, Price Stabilization under Self-sufficiency in Rice, and Integrated Development and Management of Water Resources in Indonesia.

I hadn't completed this list of readings when Ramchand asked me for an outline of my report. What? I hadn't even started! But, I promised that I'd provide one as soon as I had decided what to do. It was the Tabor and Seckler report that gave me the idea on how to proceed. Contained within the report were statical graphs of rice trends in Indonesia compared with those in other Asian countries. Given the status of these two authors and the report's topic of rice policy combined with President Suharto's saying that self-sufficiency in rice was the country's major goal, I felt I had found the right topic that would occupy the bulk of my time until Jan 23rd when Vicky and I were scheduled to depart.

During this time I relied on Masyhuri to gather data on rice production and consumption, GDP, populations of Java, "off-Java," and three other East Asian countries. Our report included urban and rural per capita and total rice consumption going back to 1982 and projected to 2020,

lowland² rice production, net of losses, to produce net paddy production, adjusted for losses from milling. We produced similar figures for upland rice. And, together, arrived at the amount of rice available for consumption from domestic sources, a key figure in our analysis. Next, we charted growth rates in lowland rice production and the ratio of "off-Java" to Java from 1983 to 1996. Our report addressed the different forms of production (technical, semi-technical, and simple), again on Java and "off-Java." The report covered Bulog's³ role in price stabilization.

We derived Bulog's average costs of carrying buffer stocks and showed that rice exports equaled imports in four of the last ten years, that is, were in balance. That laid the groundwork for plotting trend lines of paddy production for the past 16 years based on linear regressions of five-year moving averages. Results for Java showed the growth rate for annual production trending downward from 5.7% in 1980-81 to 1.4% in 1995-96 and for off-Java being essentially flat at 3.6% in 1980-81 to 3.9% in 1995-96. We interpreted these results to mean that the country will soon be relying on a small but steady increase in rice production off-Java, and the possibility that Java production may hold at the current level. Time did not allow me to delve into the meaning of these results, other than that urban population increases on Java could be the cause; and that much land still remains available for increasing areas and technological improvements off-Java. I suggested ways for Masyhuri to continue exploring this topic until my return in April at which time we could work on this together.

I closed the report by offering four scenarios that covered, what I thought to be, reasonable ways at considering the future. They were 1) continued high growth rates off-Java that brings production levels comparable to those at the turn of the century, but also creating large rice surpluses. Clearly not an acceptable alternative given either high storage costs or the

² Lowland rice production is that grown on flooded paddies either by irrigation and rainfall, or simply called paddy; upland rice is grown like wheat, barley, and other such crops.

³ Bulog: the national logistics agency that handles rice imports, exports, storage, and domestic prices.

impact on international rice prices when dumped on the international market; 2) reducing growth rates on the assumptions that production growth rates on Java continue and that the high rates off-Java cannot be maintained. Under this assumption trend self-sufficiency maintains itself beyond 2008; 3) same as alternative 2 but assumes that population growth rates never drop below 1.5% (recent growth rates have been averaging 1.6%). These results would meet trend self-sufficiency remarkably well; and 4) forcing trend self-sufficiency by requiring production equal demand with some small allowances for over or under production. Implied are that the production growth rates on and off Java can drop substantially from their current rates and still maintain trend self-sufficiency, even with increases in rice demand. I found that these four scenarios were encouraging for those concerned about the country's ability to meet its rice demands from domestic production, but I warned that with strong downward trend in growth rates on Java and whether the assumed growth rates off-Java could be maintained. I closed by saying these two topics will be a focus of our attention when I return.

So, after a rough start I had latched onto a topic that had been of central interest to the Government and was relevant to our study. By concluding trend self-sufficiency in rice production, I and the others of our project could turn to topics other than investments to increase rice production. I still wanted to learn more about rice production in terms of yields and cropping intensities. There is the interest in *palawija* as a means of diversification and nutritional benefits; O&M improvements, and turnover of small-scale irrigation systems; and to interact with Ramchand and Gunawan on benefit-cost analyses.

Vicky made a big hit with the group when she brought over candied fruit that she had bought. At the time, religion was scarcely recognizable in this largest of all Muslim countries. The women dressed in western garb, without head scarfs or veils. Ramadan began December 31st so I got to observe the staff in this regard. Nothing changed, except for no eating or drinking that I could see. Gunawan let me know he was Christian, but did not want to affront the others by eating or drinking in front of them.

I had enjoyed this opportunity to study and write about production and consumption of rice on a national level, something new to me. I also enjoyed working in Indonesia for a second time. Living at the Kristal was pleasant. More often than not I would swim for about 30 minutes when I returned from work. The pool was seldom crowed then and was large enough for me to get some good exercise. And we liked the Pub so much that we seldom ate elsewhere. We got to be known by our waitresses, Eka in particular. She was charming in a sweet, unassuming way. Before long she began calling me Mr Soup since my customary order was a beer followed by bread and the soup of the day. The office environment where I worked was pleasant as well. I got to know Gunawan, one or two of the understudies, Ade, and of course Masyhuri. I found Gunawan knowledgeable and hard working. And we had something in common in that he had worked for Herb Blank and knew Pixie. Masyhuri helped me considerably with statistical analyses, but for some reason lacked motivation.

Ramchand and I got along fine. By the second week when it looked like my current assignment ought to be extended from one to two months, he said the decision was up to him whether or not to authorize it. During the few meetings we had with senior Indonesian officials, he preferred to do the talking and for Robby, Terry, and me to keep quiet. Once when the subject turned to sensitivity analysis, I told the presiding official that I could explain this further at some other time if he liked. He said please do. When I asked Ramchand about getting back to him on this, he said it's better to leave things alone. Even in the midterm report in which all of us contributed Ramchand insisted that questions about the report be addressed to him. For whatever reason he wanted *control*. That didn't bother me; I just found it different from what I was accustomed to. He and his wife invited Vicky and me, and others, to his home on several occasions. And he and I towards the end of my assignment ate together at Pasaraya, the large shopping mall a few blocks away.

Getting to work from the Kristal was not a problem. After Robby left I continued the same arrangement for getting to work. But getting home was a different story. He and I seldom left the office at the same time, which meant that I had to hail a cab as best I could. Sometimes

signaling four or five times would do the trick. When that didn't work I would walk the few blocks up the street to the shopping mall and be able to catch a cab there. Once, during the Christmas season when traffic was especially heavy, I walked a few blocks, tried again and again, until I ended up walking the entire 8 km back to the hotel. As I walked the computer and the reports stuffed inside grew heavier and heavier. But that was not the major problem. It had turned dark about halfway back and I needed to be careful not to step in one of the many holes in the sidewalk. Eventually, I made it hot and tired, which made the usual dip in the pool especially welcome.

The day of our departure finally arrive on Jan 23rd. I had written my midterm report on rice as well as sections on national goals and strategies for agriculture, water resources, and irrigation. I also left Masyhuri several pages of instructions Ramchand had asked me to prepare. I said my goodbyes and Ramchand's driver took me to the hotel to pick up Vicky. She had paid our bill, packed, and was waiting with our bags at the hotel's entrance. The drive to the airport took less than an hour. The customs official told me that my visa had expired. And I had to explain that my one month stay had been extended another month and had assumed that the project's secretary had handled this extension of my visa. Suspecting this might be some form of shakedown I simply waited and was eventually allowed to pass to the waiting room. The trip home was a repeat, but in reverse of our trip here: a short trip to Singapore, an over night in Bangkok where we once again stayed at the Amari then on to Seoul. While waiting for our connecting flight we bumped into Jake Hautalouma, department head of industrial psychology at CSU, then the nine-hour flight to Los Angeles where we rented a car and drove to La Quinta to visit Mike and Jackie for three days before heading home where we arrived on the 28th.

Epilogue

During the first week home I returned Sam Johnson's call. He wondered if Tabor were needed on the project given what I had covered. This was a boost because Tabor and Seckler had worked together in Indonesia on several occasions; and Seckler was one of the "fine minds" at CSU with extensive experience in southeast Asia and elsewhere. Assuming my return in

April he went on to talk about some of the topics I might cover in my next assignment. He asked me how Ramchand was doing and I more or less covered for him; although, I noted the general lack of supporting evidence for some of the proposals, and my disagreement with him over swamp development. Sam closed out by saying I would eventually need to check in with CID's contract guy about my return trip to Jakarta. After hanging up the phone, I felt a warm glow about how this assignment had turned out. I was looking forward to my next trip there.

Imagine my shock three weeks later when Sam called to say that Roche didn't think much of my report. He criticized its failure to address the Asian financial crisis beginning last summer that had caused the value of the rupiah to plummet during the first week in January. There was panic buying of staples such as rice and cooking oil. While I made note of these happenings I figured it was something temporary not deserving mention in my report; and that Roche was thinking of bringing Tabor back rather than me. Responding to his request, I sent him a copy of my report. A few days later he called back to say that he thought my report was fine, but said that he had agreed to take my place in April.

With disappointment overriding by anger I faxed Roche asking what was wrong with the economics section I had written. He responded saying, "I will be frank in admitting that we have not been satisfied with the economic work so far under this Technical Assistance. The team's economists should be playing a crucial role in a wide range of areas, including (I) synthesizing the research done in Indonesian on the prospects for the demand, supply, prices, and the farm-gate profitability of rice and *palawija*; (ii) analyzing future growth opportunities in agriculture; (iii) overseeing field surveys and guiding the analyses; (iv) providing a quantitative basis for comparing development options by systematically measuring the costs and benefits of the alternatives; and (v) although not anticipated in the Terms of Reference, identifying the implications of Indonesia's macroeconomic crises in terms of its irrigation strategy. *He said that little of the economists' work was apparent in the midterm report.* I will never know if this reflects low productivity or the team's biases. Whatever the reason, after Varley's performance and my disappointment over the midterm report, I felt that we had to send a strong signal to CID

about the need for improvement. Not only were the economists' inputs obscure, but we failed to see the contribution made by many of the local consultants. Nor was there much evidence of what data had been collected in the field. This simply had to change. . . . I hope you can also understand my perspective that difficult decisions had to be made to ensure the quality of an ambitious, expensive Technical Assistance." I was left to conclude that my report to Ramchand had not made into his midterm report!

Finally, as I was filing away my notes and papers on this chapter I came across my contractual agreement with CID. My position as Economist/Policy Analyst will take primary responsibility for (I) aggregate trends in rice production and consumption, (ii) the broader evolution of irrigated agriculture during PEPELITA VI and beyond (iii) the reconciliation of data sets on irrigated areas of rice production, and (iv) the economic evaluation of the costs and benefits of strategic options for irrigation investments.

With room for some nuanced interpretation of items (I) to (iii) this is pretty close to what I had finally settled on and item (iv) would be easy for me to do during my return trip if ADB had approved my input to the Interim Report. Why hadn't I relied on this agreement with CID? I was kicking myself. But of course it was too late. But then I looked at the signature page: it had been written and signed by Jean Kearns, CID's Executive Director on January 15, 1998 and by me on January 29, 1998—well after I had returned home. Such a concise statement of work cleared me in terms of CID's requirements, but undoubtedly not with Roche. Still it was a relief to know that I had been on track and that Roche was off in the clouds. Why CID waited so long to prepare this agreement, I don't know.

After having written this account of my second assignment in Indonesia, which was not well received by Roche, I began putting pieces together. First, was Varley's decision to terminate his assignment *really* because of family problems? I wondered if he had been dissatisfied with Ramchand's leadership as an engineer. I had noted that Ramchand guarded his position as the one in charge. I had accepted this, but then I had come into the project after it

was well underway. But Varley was there from the beginning. Was it possible that Varley felt he should have been team leader, given his experience in Indonesia and having written a comprehensive report on irrigation there? He might have resented having an engineer in charge.

Rereading Roche's letter, I concluded that I had had little chance of doing much of what he had expected given that by the time I arrived Ramchand had already structured the mid-term report and that the opportunities for doing what Roche expected had already passed. Therefore, this rant was really against CID. I didn't have a chance. Even so, I felt I had accomplished a lot, without relying on the benefit-cost section, which was my forte. I had done the best I could. Of course, this is water under the bridge. But, rethinking all this was a great relief because in writing this memoire, I am literally reliving the experience!

Chapter 25: Jordan

After the Turkish and Peruvian assignments the one in Jordan came as a pleasant surprise: I was to find the country advanced, Amman clean and orderly, my Jordanian associates pleasant to work with, Peter McCornick an excellent engineer and manager, and my two assignments challenging. Although I worked long hours and worried right up to the last minute on both of them, Vicky who accompanied me for the second one was welcome company and persuaded me to visit some of the sights after finishing my responsibilities.

This opportunity came unexpectedly. Becky and family had come to Colorado in Feb 2000 for a skiing vacation at Winter Park with Vicky and me joining them. One evening while our group was dining at a Mexican restaurant at the Divide Grill at the base of the slopes we were joined by Peter and Merrium McCornick and their two children, Sean and Maki. Becky and David had gotten to know the McCornicks while living in Eritrea; and I knew Peter because he had taken my Projects Planning course. Peter told us that they were currently on vacation from his assignment in Amman where he was a senior engineer with Associates in Rural Development headquartered in Burlington, Vermont. The project with the Ministry of Water and Irrigation, funded by AID, was primarily for the expansion of agricultural production using wastewater from As Samra, the large evaporation pond serving the greater Amman area, but also included expansion of freshwater for municipal and industrial use. ARD's team had addressed technical issues such as water delivery and drainage, groundwater exploitation, salinity issues, cropping patterns, and soil and crop contamination. They had chosen project sites and prepared technical designs, but had not addressed the economic aspects, which was where Peter wanted my input. Seemed like a perfect fit for me. Was I interested? Receiving Vicky's nod of acceptance I answered yes. This was not a difficult decision. I still wanted to take international assignments and we had heard good things about Jordan, dating back to our time in Ethiopia. Back then, Dr. Abu Sharr, a Jordanian told us about his country and urged us to visit it some time. He was FAO's rep in Addis, handsome, suave, and well-regarded. After the end of his tour of duty in

Addis he and his wife moved to FAO's headquarters in Rome. During a return visit he told a group of us how he preferred living in Addis because of the hectic life in Rome, especially the commuting to and from work. Somewhat seriously, he told us that before leaving for work each morning, he kissed his wife as if this goodbye would be their last.

Communicating by email Peter and I agreed that I would make two month-long trips there, one in November and the other the following spring. Vicky and I agreed that I would make the first trip alone and that she would accompany me on the second. Accordingly, I took an overnight flight to London then caught a connecting flight to Amman on Royal Jordanian Airlines. On the day of my departure the morning news reported a bombing in Jerusalem; and during the layover in London I learned that a plane headed for Amman had been hijacked. Although these types of events were not uncommon, this one caught my attention. Even so, those boarding our flight seemed relaxed So, I did my best to remain calm along with the others, and glad I did since all was calm at Amman's Queen Ali International Airport. I recognized the terminal because I had landed there before on my way to and from Sana'a.

Telling Passport Control that I had "Nothing to Declare" I soon entered the terminal lobby where I saw a large sign with my name on it. Mustafa, one of the Project's two drivers took my luggage and headed to the parking area. Although only 35 km away, it took us about an hour to reach the Marriott Hotel in the center of the city. The absence of any form of security at the entrance surprised me, given the tension in the Middle East, and the precautions at the Oberoi in Colombo. I was truly impressed by the luxury of this five-star hotel. By now Peter using his cell phone wanted to know if everything was okay. He said that he would stop by mid-morning tomorrow, which would give me the opportunity to sleep-in. I suspect Peter had arranged for me to arrive on a Friday, thereby giving me a full day's rest before reporting to work.

Luckily, I was able to sleep that night. I awoke up with the sun shining through the gap in the draperies. The Star, a weekly English-language newspaper published in Amman was

stuffed under my door. So I scanned the political, economic, and cultural sections while lying in bed. After showering to help me wake up I left the hotel to take a leisurely walk around the neighborhood. It was a lovely day: clear, calm, and probably 72°. The area around the hotel was nice, with neatly-swept curbed streets bordered by eucalyptus and cypress and with lots of white-stone residences with well-kept yards, olive trees, and an occasional grape arbor. Exploring the hotel I located the large banquet room called Club Med and sat down to a light breakfast of fruit, cereal, pastry, and tea. I skipped the elaborate layout of eggs cooked as one waited, choices of meat, cheese, *ful* (a Middle Eastern bean dish), and other heavy fare. Back in my room I laid down to rest my eyes. It was 1:30 a.m. back home.

Around 11:00 Peter, Merrium and their two children showed up. Sitting in the spacious lobby Peter ordered tea, cappuccino, and hot chocolate for Maki. Peter talked about life in Amman, the project, and Tom Cusack, the team leader. Tom was an Irishman and on the Oregon State Univ faculty. He said Tom knew of me through FSR. Peter warned me to stay away from the "old quarter," otherwise, the rest of the city was okay. As they left, he and Merrium invited me to dinner at their home that evening, but I declined doubting I could stay awake that long.

The rest of the day was pretty much a blur. Feeling sleepy I laid down simply to rest my eyes and woke up two hours later. I ate at the sidewalk café, looked at the large outdoor swimming pool which was nice enough, the water was cold and no one was using it. Then I walked to the shopping mall across the street just to snoop around the Royal Jordanian and Meridian hotels. Buttressed by a late night snack I was able to stay up till 11:00, but didn't fall asleep till 12:30.

Even though I found it difficult to go to sleep, I woke up early. I returned to the Club Med where the Maitre d'escorted me to one of many empty tables. This time I did avail myself of the many options for breakfast. Afterwards, Peter met me in the lobby and we walked around the corner of the hotel to the Ministry that was housed in a clean, modern, two story building. We

passed through the corner entrance, which was literally open to the public. No closed doors, guards, nor sign-in sheet. Just up a flight of stairs to the second-floor offices of the Project. I recalled that SRI was far more tightly secured the last time I visited there.

First off, Peter introduced me to Tom who was slender, fit, and looked about my age. We chit-chatted awhile then Peter, who appeared to be second in command, introduced me to the team who were either in individual offices and or a large bullpen. They were Ramzi Sabella, a water reuse engineer who would share an office with me, Hani Rashed, an irrigation engineer with a PhD from South Hampton, Yasser Nazzar, a specialist in water reuse on loan from the Ministry, Tamim Abodaqa, a GIS specialist, Ahmad Abu Hijleh, a hydro-engineer specialized in rapid rural surveys, Nisreen, a junior engineer specializing in cropping patterns, Yasmin, the project administrator who was formerly a secretary in the Ministry, Mohamed Chebanne, with a PhD in civil engineering from CSU, Andrew Alspach, a monitoring specialist from ARD headquarters, and Swasan, the project secretary. Yasser, Nisreen, Yasmin, and Swasan were females; all were Jordanians except for Yasmin who was Iraqi, Chebanne who was Tunisian, and Alspach who was from the States—a nice male-female, multi-national mixture. I found interesting the lack of head covers let alone veils, the casual dress of the women that included jeans, no obvious discrimination regarding gender, position, or academic level, and, that those not from the States all spoke English so well!

Next, Peter took me into his office to view a power-point presentation on the elements of the project and its current status. He followed this excellent summary with a description of the three highland areas he wanted me to evaluate. These were HL#2a located about five km east of As Samra along the Khaw-Mafraq highway with a gross irrigable area of 1,020 ha planted primarily in rainfed barley; HL#3 located about 14 km east of As Samra with a gross irrigable area of 800 ha in which the Dhuleil irrigation project covers 460 ha based on deep-well pumps that deliver groundwater to an open reservoir that is then distributed through lined distribution channels where cropping patterns had moved away from vegetables into field crops; and HL#4

located 35 km northeast of As Samra with no estimates of its irrigable area, although it is considered extensive given the current irrigation activity there, and the deep wells operated by large farmers who grow fruit, vegetable, and field crops.

At this point I explained to Peter the approach I would use in evaluating these alternatives. I would calculate the rate of return, or net present worth, based on annual cash-flows, as I had taught in my Projects Course. I would begin with an economic analysis from the national point of view to see if investment is in the national interest. If so, I would then make the same type of calculation from the farmers' point of view. Finally, if an investment passes both these economic tests, I would move to a financial analysis from both points of view. This last part looks at the requirements and availabilities of domestic and foreign currencies to the government and to private investors. Peter said he remembered the approach and thought it appropriate.

By now it was time for lunch. So, I walked with Peter and Andrew a couple of blocks down the street to a lower-level, open space that served a working class clientele. We sat down at a small table and ordered from a menu posted next to the checkout window. We chose humus, tahina, *ful*, Greek olives, and pita bread–all local and all very good. We each had a small plate on which we poured olive oil then used pieces of pita bread as scoops for the other items. My share of the cost was the equivalent of two dollars. We were to return there often. Back in the office I began delving into the stack of reports Peter and Ramzi had placed on my desk. I began with the project's pre-feasibility study that Peter had put together. I was able to make it through the day till 4:15 then went back to my hotel room and *crashed*.

The next day as I studied Peter's report certain aspects of the project cleared up for me. I learned that some highland farmers had access to well water as well as wastewater, that wastewater was to be used only for agriculture, preferably *not* for vegetable crops, and that the availability to wastewater will increase along with the increase in potable water use in the greater Amman area

whose population was projected to grow at 4.4 percent annually over the next 20 years. Later in the day, I was surprised to learn that these farmers relied mainly on drip irrigation, even though groundwater from the highland aquifer and wastewater from As Samra were generally available. Most of the developing countries where I had worked made little use of drip irrigation. Also, some consultants to Jordan had pointed out the problems with drip, such as clogging due to algae buildup and the accompanying need for technical assistance. Given the nature of my assignment, I would do little more than point out my concern. We talked past quitting time, which I thought was a good sign.

Back at the hotel, I headed for the Champions (the hotel's popular bar with tables off to the side and a small dance floor) where I ordered a beer then soup. Although I became fond of this "hangout" it never quite matched the one in Jakarta that I liked so much. While sitting at the bar I struck up a conversation with a young couple. Andrew said he was from Los Altos and Jessica said she has an American father and Peruvian mother, who, even more coincidentally is supporting the political bid of Absalón Vásquez, former Minister of Agriculture. What's interesting about the latter is that Vinio Flores and Pepe Salas know Vásquez and at one time were suggesting that I join them and the Minister in some sort of proposal. Nothing ever came of it, but I do have a photo at home of Vino and the Minister standing together. Another case of the *high probability of some rare event*.

Early during this first week Peter arranged for me to meet two who were responsible for the project--Fayez Battieneh, Assistant Secretary General in the Ministry of Water and Irrigation and Dr. Amal Hijazi in AID. He also arranged for me to meet with Mohamed Rahahleh, Director of Ag Economics in the Ministry of Agriculture, Engineer Yousef Qaat, Head of the Studies Division of the Ag Marketing Corp, and Jamal Al Rashdan of the Jordan Valley Authority. I also began scanning relevant reports, such as Stephen Grattan's technical report on the impact of recycled water on crops, soils and irrigation management and the "Forward" reports¹, which provided *considerable* information, on cropping patterns, yields, investment and production costs, water use, and similar information useful for my economic analyses, and Government bulletins on agricultural statistics. Seeking additional data, I was impressed when Ramzi simply went to his computer to download from Central Statistics the national data I had requested concerning GNP, foreign exchange rates, agricultural employment, and inflation. It didn't take me long to realize how fortunate I was to have so much information at my fingertips.

Two tasks occupied my time during the next week. One was to absorb as much information contained in these interviews and reports and the other was to become familiar with the details of the three highland projects. Peter's study described wastewater deliveries via large-diameter pressure pipe that included the costs of construction, O&M, and repairs; and the Forward reports provided similar costs for the farmers' investment in their drip systems, buildings, and equipment, as well as common cropping patterns, yields, farm-gate prices, and net profits. Although the Forward reports pertained to the Jordan Valley, they provided "illustrative" data that I could use eventually after adjusting for Highland practices and conditions. My task was to take these "raw data" and make economic sense of them in a way useful to the Government and AID decision-makers. Because my methodology was one I had used so often, my task in this regard was simply to *grind out the figures and present my findings*

For example, Forward. 1999 and 2000. Summary Reports: Assessment of water quality variations in the Jordan Valley and Annexes on water, soil and plant analyses, cropping patterns and yields, and economic analyses. USAID, Amman

in an understandable way. I began by assuming that the three projects could be undertaken *independently* and that HL#2a would be the most viable because it would lie closest to As Samra and therefore cost the least to build and operate.

Rounding out this week 1) I had been able to choose the average farm size as being 20 ha, 2) Tom told me not to worry about the application of wastewater contaminating the highland aquifer because adequate freshwater was available there, 3) Peter assured me that the impact of water salinity on yields had already been incorporated in the consultants' reports, 4) a consultant had found that some farmers were ready to sell their water rights to the Government if given the chance, which implied that irrigated farming in the highlands was not particularly profitable, 5) I wondered if the Forward reports were a poor data source given their inclusion of eggplant and squash in the cropping pattern given that they were *net revenue lossers*, and 6) I was mystified by the widespread popularity of olives given their low returns and wondering if the answers lie in the longevity of the tree, simply a traditional choice, or the high value of olive oil. I hadn't tried to resolve these last two questions. Instead, I just reduced their amounts in the crop-mix as shown in the Forward report.

As the weekend approached, I persuaded Peter to take me to the field. I wanted to get a feel for the area and not be "blind-sided" by writing or saying something that revealed my ignorance of conditions on the ground. Besides, I wanted to see the countryside. Getting an early start we drove to HL2a where we talked with an Egyptian farmer about his sharecropping arrangements. Encountering an Egyptian farmer didn't surprise me, since I had read that despite the 13 percent unemployment rate in the country many Jordanians feared working with wastewater. The Egyptians were not; besides they were motivated by the money they could send home. Next we visited the southern tip of HL3 where we talked with a young well-to-do Jordanian who was supervising the irrigation of a large, newly-planted olive grove. He told us about the family residence in Amman, his having gone to graduate school in England, and how important it was for the average Jordanian to have one's own olive grove. Did this mean that tradition was the answer to my question about the low profitability of olives? Traveling to HL4, some 50 miles east of As Samra gave me a chance to see more of the countryside that included low-rolling hills, scattered homesteads with small orchards set within their enclosures, and reasonably well-maintained rural roads. The area impressed me as an island of serenity within a tumultuous sea of conflict. En route Peter described how not too long ago, Iraq had moved scores of tanks just east of us but didn't cross the border.

On our way back to Amman we drove along the edge of a planned, but undeveloped part of HL2a. It was in this area that I saw expansive areas of scarified land that had been seeded with wheat and barley. Later, when reading about the low yields of these two crops I could understand why. I had hoped to see As Samra simply because of its reputation as one of the largest of such treatment areas in the world. But, Peter, being the practical guy he was told me that there was little to see, just a large, shallow pond. So, after nearly five hours we headed back to the office.

I spent the rest of the day there recording my notes on the trip and discussing with Andrew what I had seen. It was well past quitting time when the two of us began the roundabout route we are forced to take when working late. We hadn't gotten far until we encountered a heavy cloud of smoke that filled the hallway. Andrew began coughing deeply, nearly hyperventilating. We

didn't know what to do, since this was our normal route out of the building. It thought it might be fumes from diesel oil, or even gas! After all, there was plenty of conflict going on in the Middle East. We back-tracked to the office and found Tom and Peter still there. Tom called Yasmin to call Security to find out what was going on. Meanwhile, Tom passed it off as nothing to worry about, saying that if we were overly concerned we could go out the window to the paved area some three meters below. This looked a bit far to Peter and me, but not to Andrew who was considerably younger. He climbed out the window, grasped the ledge, and finally let go. He landed easily enough, walked down the passageway, and was soon out of sight. Before long he came back through the fog with a guard who then unlocked the door to an alternate route. The guard explained that the Ministry, assuming no one would be in the building this long after hours, had arranged for the building to be fumigated. So, it wasn't gas, nor were we being attacked. Guess we let our imagination get out of hand. But not Tom. He remained calm throughout it all.

Back at the hotel I waited for Mohamed Chebanne and his wife to pick Andrew and me up and drive us to the send-off party for Andrew at a popular local restaurant. When we arrived we were directed to a large room with long tables suitable for parties, one frequented by Yasmin, who had made the arrangements. Tom and Gil, his Oriental wife, a few other members of our team, and a computer consultant made up our group of a dozen. Peter and Miriam were absent because they had obligations elsewhere. The dinner was outstanding, beginning with the *meza*, that consisted among other thing humus, tabuli, pickled spinach, grape leaves, tequeñas, and lettuce with dressing. Throughout the meal I kept thinking of my doctor who said I'd be all right as long as I only ate cooked food! But I ignored the advice . . . and survived. We were also served *arak*, a drink similar to Ouzo and Pernod. I accepted a refill without being asked (or thinking), but declined a third. I thought, "It'll be something if I get away with this," especially given the wastewater problem. Afterwards, Yasmin brought Andrew and me back to the hotel in her Mercedes. On the

way she told us about being a divorced Iraqi with boys ten and 14 to look after. She said that she had phoned them several times during the evening to see if they were all right.

I didn't need to go to the office over the weekend because I had plenty to do in my room. I set up a cash-flow spreadsheet whereby I could calculate illustrative rates-of-return. By now I had the costs of investments, O&M, repair, and replacements for a typical drip system and the government investments in pressure pipe, pumps, valves, other equipment, and buildings that Ramzi and Peter had provided. Next, I relied on the 85:15 ratio of fruit and vegetables shown in the Forward report. Earlier, Ramzi had shown the farmers' preference for citrus, apples, and melons, as well as the aversion to olives. Also, Ramzi had pointed out the widespread planting and profitability of tomatoes, potatoes, and cucumbers; so, I included these and a few others in my representative mix of vegetables. Not only did I have an estimate of the areas planted to each of these crops *in the Jordan Valley*, but I also had the costs of seed, fertilizer, insecticides, and labor, crop yields, and farm-gate prices, with which to produced a composite set of values. I did not include wheat and barley because they are not suitable for 20 ha highland plots.

By Saturday noon I felt I needed to stop my calculations and begin drafting my report, since I had to have it finished by Thursday *and* I didn't know how long it would take to write. Surprising how fast time flies when under pressure! I begin by writing short paragraphs of what I thought to be the most important parts. But, I soon found that this approach wasn't getting me anywhere. So, I turned to the Introduction, which went pretty well. At least now I had something in report form. Next, I began describing my method of analysis, but writing this as part of the body of the report dragged on and on. So, I thought it better to make this an appendix where I didn't have to be so careful about content and context. By mid-afternoon I began describing the three options. By dinner time, I simply ran out of gas, so I headed for the Champions Bar, where I started with a Scotch then the house red and a cup of onion soup, which proved excellent. By the time I had finished, I felt relaxed and pretty well satisfied with what I had accomplished. In this state of mind, it came to me, "But of course our waitresses were not Jordanian; they are

Filipinos!" Islamic custom, although seemingly mild in Amman, would *not allow the hotel's barmaids to be Jordanian women*.

The first thing Sunday morning I told Peter and Ramzi what I had accomplished over the weekend, got their approval, and forged ahead. I began by selecting HL#2a for the rate of return from the national perspective because it would likely have the highest rate of return. But I found its cash flow to be negative, thereby producing no positive rate of return. Now, with HL#2a not in the Government's interest neither could HL#3 and HL#4 be recommended, which in turn meant that I need not estimate the private rates of return nor bother with the financial analyses. In other words, why test the financial viability of a scheme if its not an economic use of the country's resources? I ended up making just the single calculation. When I reported this finding to Tom, he said he suspected as much. He was just waiting for someone to make the case! Peter said that he had been in agreement with me all along. I summed up by saying, "It's uneconomic to pump water up-hill to produce marginally valued crops."

I was down to the last two days and wondering if I would get everything done, when Tom told me that Amal Hijazi wanted me to come to her office for a debriefing. I said I would rather not go there, given how little time I had left. Okay, he said, "Just go for 30 minutes, the location is close by." I really had no recourse. So, I went. It wasn't exactly close—possibly 20 minutes by car. When Mustafa drove up to the entrance of the US Embassy, where AID was housed, I was aghast. The place looked like a fortress! The road in front of the Embassy was divided with reinforced concrete barriers to keep traffic away from the curb, a two meter high chainlink fence was next to the sidewalk with the entrance set back seven meters with guards, metal detectors, and a communications station. Once cleared I was allowed into an inner court where I encountered another Marine guard in a small building behind a bullet-proof window. He phoned Amal followed by a ten-minute wait for a guard who would escort me to the AID building that was separated from

the Embassy. Even now the guard had to punch a code into a box outside the door before we could get inside. Yet, I still was not cleared because I didn't have an ID badge. Eventual the another guard brought that to me then phoned Amal to let her know that I had arrived. Never before or after had I gone through security precautions like this.

I had a good meeting with Amal. Since we had already met in my office at the Ministry I dwelt on what I had done since then. In the process, she said she was surprised that ARD hadn't sent me background material on the project before I arrived. Then defensively she admitted that AID doesn't pay contractors for the time they spend in preparation. She went on to say that an assignment such as mine should have prior screening by an inter-ministerial committee. I told her that I thought this made sense; but when I related this to Tom he said he didn't think much of the idea: better just to get started than waste time this way.

Before long Amal took me in to see her boss, Cecile Mango, who was head of AID's environmental program. When we finished talking about wastewater deliveries she moved on to municipal water. I told her about *option values*, i.e., asking what those affected would be willing to pay for improved deliveries, explaining that this involves a series of "What if questions" and "How much would you pay." At this point I was *winging it* since I hadn't gotten around to thinking about this next stage of my assignment, although it was something I had written about in conjunction with a paper I hoped to publish. She said it wouldn't work here because the Jordanians don't want to pay *anything* for water. I then referred to the concept of *cost effectiveness*, which she thought might work. Upon leaving I promised to send her a copy of my paper on these two concepts. I felt the debriefing had gone well. This whole affair lasted far longer than the half-hour that Tom had implied, but having the meeting had been important.

When I returned to the office Peter told me that the Ministry required a debriefing as well. Ministry representatives would be Susan as the leader and Yasser Nazzal, who said he knew Colleen Brown, a colleague of mine from CSU. Tom, Peter, and Chebanne represented ARD. The meeting went well enough. I started off using my notes, but soon found them unnecessary. Susan asked lots of questions that I could answer only partly, occasionally not at all. But this didn't seem to matter. Peter filled some gaps by stressing the need to maintain water quality. Before long the meeting broke up and I was able to return to my report. At 9:00 I returned to the Champions for a quick meal of Chinese noodles and a glass of wine.

Back at the Ministry the next day I wrote the section on crops again because I had erased the file, which was just as well because this time it read better. I cut out what I had written on farm investments because this was a duplication of what was in one of the tables. In its place, I justified my choice of the size of the typical farm as being 20 ha. Also, I found that I had used wrong pipe lengths in estimating the cost of the drip lines. On and on it went until I quit writing so that I could plan what I needed to do the next day. At this point I felt in pretty good shape: I would only have to write an appendix on olives, the executive summary, and fill out the end-of-project summary sheet. It was 1:30 a.m. when I quit work.

Getting right to it the next morning I attacked the Executive Summary, which took far longer than I had expected. Tom had said that this was the most important part of my report because it was the only part the Ministry guys would read. As the hours whizzed by, all went smoothly. I set the copier on automatic, which fed the sheets through the machine in no time at all. My report came to 25 single-spaced pages, including appendixes. I left the office at midnight, went back in my room, and began stuffing things into my suitcase. I then *froze!* I couldn't remember where I had put the key to my suitcase. Eventually I remembered seeing it on a string pinned inside my carry-on. Then, it was downstairs to pay my bill. Mustafa was there waiting for me. Without

traffic at this time of night it took only 40 minutes to get to the airport over a nicely lit highway. I had eaten nothing since breakfast except for a light lunch. Peter had invited me to their Thanksgiving turkey dinner, but with so much still to do I turned him down. And glad I did! I checked in at the Lufthansa desk and was soon on my way home. It had been a busy three weeks.

I returned to Jordan five months later, for the second part of my assignment. This time I was to look at the economic feasibility of five options to free-up freshwater in the highlands, four options relating to the use of recycled wastewater three of which were in the Jordan Valley and one in the Wadi Zarqa, and the option of groundwater recharges in the King Abdullah Canal system. Consequently, this assignment was far more involved. Because I would be paying for Vicky's travel costs, we agreed that I would arrange for our trip with our local agent. Eventually we agreed to depart on April 19th.

By April 12th I still had not received the go-ahead from ARD. At Vicky's urging I sent an email to La Rosa at ARD headquarters, reminding him that time was short if we were to leave by the 19th. On the 17th La Rosa sent an email saying that they were FedEx'g my contract that I was to sign and return immediately. The package containing my contract arrived as promised, but then La Rosa called to say that they did not have country clearance. On the morning of the 19th LaRosa called to say that they did have country clearance and to proceed as planned. Having been ready for so long it didn't take us long to jump into our rental car and drive to the Denver for our 7:00 p.m. flight. With our United flight to Chicago delayed we only had 40 minutes in O'Hare for our connecting flight that was from another terminal. Given this tight schedule we informed a United representative in Denver about our problem, especially given that our connection in Chicago was on an overseas flight! What should we do? She told us that the airlines would probably have the next flight wait for us since about 30 others on our flight also had connecting flights. Once onboard we told our stewardess about our situation and she said she would inform the pilot about our situation and that United/Chicago would have either an electric cart ready for us, or have a United representative ready to help us. But, when we got off the plane in Chicago nothing happened as promised, leaving Vicky and me to our

own devices. Luckily, a local Chicagoan hearing about our plight, said the terminal where we wanted to go was close by, and pointed us in the right direction. After finding the proper gate we walked right onto the plane, the door to the entry gate closing behind us! Eventually we got over our fuss with United and enjoyed the flight to Frankfurt.

After arriving at 2:30 p.m. (6:30 a.m. back home) we had a seven hour wait for our connecting flight. Vicky and I found a pleasant spot in the terminal away from the traffic where we could read, doze, or just sit. This gave me time to review this assignment's scope of work, as well as to review the report I had written, which didn't read as well as I had thought. Discouraging, but nothing I could do about it now. Before our 5:00 p.m. departure we treated ourselves to bratwurst, sauerkraut, and beer. Always a favorite during my German stopovers.

We arrived in Amman on-time at 2:40 a.m. Clearing customs was a breeze. We simply walked under the sign "Nothing to Declare," where officials paid scant attention to us. Leaving the secure area we saw Sabri Abu Sham, ARD's driver/expediter waiting for us. Our trip to the Marriott was quick so that we were checked in and in bed by 5:00. I dropped off quicky, slept soundly for two hours then went down to breakfast where the two waiters who had served me before gave me a warm welcome. Stepping outside for a quick walk I found the weather was hazy, windy, and warm, which reminded me of Cairo. By early evening Vicky and I were both hungry, so we went to the Sportsman Bar where the waitresses gave me a nice reception. They told me the Bar would soon be closed for renovation till July. So, that removed this as a pleasant hangout. But at least Vicky got to see it this one time.

At breakfast the next morning I met Dave Cone, who would be advising ARD on groundwater issues. He said he manages a water district in Central California, grew up in the Porterville-Tulare area, and that his wife comes from Lindsay. Another rare event, given my time in the small town of Lindsay. Afterward breakfast Mustafa "walked" us to the Ministry. After getting Dave taken care of, Tom handed me two reports to read. One was ARD's *Midterm Draft Report* to AID and the other was James Fitch's recently completed report,

Curtailment of Groundwater use for Irrigated Agriculture in the Amman-Zarqa Basin Uplands: a socio-economic analysis. Earlier, Peter had thought about assigning this topic to me in addition to the one I had. After reading the report, I was glad Peter found Fitch because I doubt I could have produced a report as good this one. Interesting was the fact that I knew Jim who had been a consultant to the Tech Agency in Addis. Thus, I read Fitch's report expecting it to be well done, which it was. His assignment was to help establish an Agricultural Advisory Service as well as propose regulations governing Highland cropping areas, groundwater extractions, recycled water replacement for groundwater, and buy-outs of existing wells. I was especially glad to read that he favored "buying out" water in marginally productive areas because I had suggested as much during my first assignment. I also felt comforted by his use of benefit-cost methods similar to those I use.

Reading his report I learned that this project aimed to help retired military and civil servants and to settle Bedouins tribes by providing both groups with small farm plots, water rights, schools, roads, and services. The areas under study included the Amman-Zarqa Highlands, three farming areas in the Jordan Valley, and the Wadi Zarqa channel. Olives made up 70 percent of the tree crops with citrus being the next most popular crop. In addition, wheat and barley were planted under dryland conditions. Fitch also estimated the values of land and water based on the value of crops being grown. I planned to use the value of land in calculating the cost of buy-outs, and the value of water in my discussion of pumping fees.²

Fitch found that the cost of pumping water to the Dulayl and Hashimiya areas was less than the value of the crops produced from this water, which helped justify this activity. In another instance, he estimated that the majority of farmers rely on drip irrigation. I found this observation curious because drip irrigation had been *unpopular* among peasant farmers in all of the other developing countries where I had worked. Consequently, I thought this a poor choice, especially since the Bedouins were traditionally not farmers, would find it difficult to master

² Except that I used a World Bank study of the cost of fossil water from southern Jordan delivered to the Highlands as an upper value for freshwater.

this means of irrigation, and besides, water was not scarce. The fact that the vendors of the drip systems did not help farmers once a system was installed was not a good sign either. Eventually, I came to wonder if this choice of technology was one of the reasons why so many Highland and Jordan Valley farmers operated at a loss.

Fitch also found that for 60 percent of highland crop revenues were less than the associated variable costs, with tomatoes being one of the losers. However, figures from the Forward reports, showed that citrus (a popular choice) and tomatoes *were* profitable, but squash, eggplant, and potatoes were not. And that areas planted in olives were unprofitable. Still, 70 percent of the area planted in tree crops in recent years has been in olives. Perhaps the low yields are from immature groves.

Fitch concluded that serious over-extraction of groundwater had caused the watertable to drop, which in turn increased pumping costs and lowered water quality leading to lower crop yields. I wondered if farmers would switch to more salt-tolerant crops. Fitch also mentioned deficiencies in well licensing in which some wells are unlicensed, some licenses contain no pumping limits, and in some cases the Government made no attempt to enforce the limits.

I agreed with Fitch when he said that irrigation was a low-value use of water, but parted company when he suggested relying on the Agricultural Services Agency to help resolve farmers' problems. I had read that farmers felt the Agency had betrayed them by forcing cropping patterns on them in which they lost money and the freedom to choose which crops to grow. Even without this *faux pax* most extension services had not been good. Despite this history, Fitch suggested that the Government strengthen the licensing system by setting flow limits on all wells and ensuring that all meters work. I could but wonder about these recommendations given Dave's finding, which I report next.

Turning now to Dave. We occupied adjoining offices and ate breakfast together; occasionally he joined Vicky and me for dinner. Dave's major task was to gather information on well metering in the Highlands. He made several trips around the area, reported back to Peter and Tom, summarized his findings, and wrote brief reports. His mannerism suggested that he knew what he was doing and how to go about it, revealing itself in his relaxed manner and absence of anxiety.

He said that 17 years ago the Government began issuing licenses to drill in the Amman-Zarqa highlands along with pumping restrictions, requirements that meters be read monthly, and fines be levied for improper use. He estimated that 94 percent of the area's wells had been metered, which was a major investment. But, as a surprise to both of us he said that the meters were of little use because either the farmers bypassed them, or the Government didn't enforce the restrictions or impose fines. Furthermore, he doubted that the Irrigation Advisory Service could improve things. Dave also found that 30 percent of the farmers preferred to be bought out, and that most of the farmers over-irrigated. Shades of Clyma! However, I did wonder about the relevancy of some of Dave's recommendations given that the Government was about to de-emphasize Highland irrigation as a way to conserve groundwater for municipal and industrial use. Even so, his short final report and de-briefing came off without a hitch.

Through subsequent meetings Tom and Peter said that they expected me to suggest ways to expand freshwater availability for households, the refinery, and the power plants.

Alternative sources were pipeline deliveries, deep wells, and selectively substituting recycled water for freshwater. During this early phase I read reports, analyzed the data, and wrote, as well as tested my ideas with Peter, Ramzi, Dave, Nisreen, and Tom. Rather than trace the

³ Nisreen deserves mention. I turned to her when I needed help with the Forward reports concerning cropping patters, profitability of irrigation in the Jordan Valley, and population estimates in the greater Amman-Zarqa basin regarding my projections of freshwater demand and recycled water output from As Samra. She was in her mid-20s, pretty, pleasant, and, fortunately, quick and accurate. Often wearing jeans she interacted easily with her male colleagues. At times I forgot that she wasn't American because our relations were so natural.

evolvement of my ideas and rationale, which would be dull reading, I'll now move on to *our life* at the hotel and other activities.

Vicky and I took most of our meals at the hotel where we eat breakfast separately, except on Fridays and Saturdays. Once, when I was "suffering" from a head cold, the headwaiter on his own initiative brought me a glass of hot lemon water as the local remedy. I thought his concern touching. Once the Sportsman Bar was no longer available Vicky and I began having dinner in the main dining room, where the hotel threw occasional events, such as fish night with a Mediterranean Villa setting, another event featured a Spanish guitarists, and a third event was in honor of hotel's long-staying guests. We showed up for the first of these at 7:30 with scarcely anyone there. But by the time we headed back to our room the place was jumping. We were just an hour and a half too early.

But the most memorable night of all was the first of these. About midway through the main course, my throat seized up. It began with hiccups that wouldn't stop, my throat began to constrict, and, before long, saliva began accumulating in my mouth. Recognizing the problem as similar to the one I had in the Philippines, I got up and headed for the Men's Room. When the "attack" eventually subsided I looked around and realized that I was in the Ladies Room! Luckily, I made my *escape* unnoticed. Back in my room Vicky theorized that I must be allergic to one of the local spices, just as had happened years earlier while walking through a park in Bangkok where spices were being sold.

On the weekends Vicky and I often snacked in our room on cold cuts, crackers, and fruit that we bought at a Mom & Pop store nearby. Towards the end as the pressure continued to increased, we relied on room service so that I could work while eating. But for the most part, the meals I took were to maintain my energy rather than for pleasure—not to Vicky's liking, but something she put up with. The Piano Bar was a popular spot that overlooked the main lobby below. When Vicky rebelled against eating snacks and sandwiches we ate dinner at the Library. There, the setting was elegant—the room secluded, the paneling dark oak, and the

menu high-class. We never considered "going out on the town," although the first-class hotels nearby were sure to have excellent dining facilities of their own.

Occasionally in riding up or down an elevator one or more Saudis would ride with us. Their immaculate, flowing white robes, gold-braided headdress, black beards against their light skin, and regal bearing exuded dignity, but not friendliness. Seldom did they acknowledge our presence. So, after a quick glance, we stared straight ahead. Don't know what would have happened had we said, "Hello." It's just possible they might have answered with a "Hello" of their own.

Beyond the occasional dining at the *Library* our life was simple: Vicky tended to hole up in the hotel, as she preferred to do, while I put in long hours working. Peter and Merrium had us over for dinner one evening for a send-off for Ramzi who was leaving ARD to join another consulting firm. Tom and his Thai wife Gil threw a dinner for us and a few others primarily to advise Vicky on our end-of-tour trip to Petra and Aqaba. And I took a breather to participate in one of Tom's "little walks." During his time in Amman Tom had formed a group of his friends to take weekend walks through the countryside. Speaking loosely he compared this outing to a British *hash*, 4 except the participants didn't run. Vicky preferred not to participate, but I persuaded her to join us saying she could drop out whenever she liked.

So, at 7:45 one Friday morning Tom and Gil picked us up at the hotel. Then we rode to a residential area with a "Car Park" where we were to congregate. Bit by bit our group of eleven had formed and we were ready to head north. The others were a guy from USAID, Andreas the German advisor to Jordan Valley Authority, Ove, the Danish representative to the local UNDP, a British teacher of English as a Second Language, his Thai wife, and their child,

⁴ The name dates back to 1938 when nine British officers in Kuala Lumpur known as the Hash Hound Harriers would take weekly runs to shake off their weekend hangovers, from *The Hash Harriers: the Original Drinking and Running Club*.

and Donna something. Once assembled, we headed north in caravan style passing through the Zarqa Governorate (of Abu Musab al-Zarqawi fame), to the northwestern Governorates of Jerash and Ajloun. Our destination was a Ajloun castle built around 1,185 to defend against the Crusaders. The castle was atop a hill overlooking open fields and low stone fences that I suspect served as property lines. It was in reasonably good shape with its large stone structure and steps still in place. Only some of the rooms were fully enclosed. While walking up one of these wide staircases Vicky and I stepped aside to let a small group of young ladies walk around us. They were casually dressed without head coverings and had several young children in-tow, two had babes in arms. Vicky made eye contact with a couple of them. With gestures and a few words in English they indicated that they wanted to take a picture with Vicky holding one of the babies. After the last picture was taken, Vicky feigned the notion that she was going to keep the baby she was holding, saying "No, you gave the babe to me. Now, he's mine!" which made the group break out in laughter, saying, "No, no, no." All in good fun. We eventually parted with lots of smiles and friendly "goodbyes."

By now Tom was anxious to start his "little walk." Graveled paths emanating from the castle made the first part of our walk easy. With some persuasion Vicky walked with us down a gradual decline for about a kilometer. By then she had enough and headed back to the parking lot to wait for us. Tom's "little walk" turned into a "long walk," but at a leisurely pace. The day was clear and calm. So, the time passed quickly. About two hours out we came across a farmer working in his olive grove with grape vines hugging the ground. He seemed neither surprised nor offended to find us on his property. He told us he farms 30 dunum (3 ha) and plows with two oxen to keep the weeds down. I doubt that he spoke English, so we must have learned this from someone in our group who spoke Arabic. As a goodwill gesture he gave us a small packed of green "cherries" as we departed. Along the way I took advantage of the opportunity to talk with Andreas about his work with the JVA.

Returning to our cars we descended single file into the Jordan Valley where we drove on narrow, unpaved, and winding roads along the Jordan River, which was not much of a river at all. After awhile someone in our group spotted an archeological tell and suggested we stop to take a closer look. These were mounds of accumulated soil and debris. Some date back to 1,000 B.C. The tell in front of us was over a hundred feet high and covered several acres. We climbed to the flat top following marked paths intended to minimize trampling. I resisted the temptation to pocket one of the pottery shards. From there we continued our journey south along the Jordan passing irrigated fields of the sort I had read about in the Forward reports until we reached the JVA guest house set on a ridge overlooking the valley. Yasmin, Nisreen, Swasan, and Sabri were there. After a couple of drinks we sat down to barbecued shish kabob, ful, tomatoes, and a few other dishes. Later, when Yasmin brought out Nisreen's birthday cake we realized why we had stopped here. After awhile we began our journey back to Amman. I had hoped that we would backtrack along the Wadi Zarqa in which farmers used recycled water to grow vegetable crops much against the Government's wishes. Instead, we headed back through a broad valley of attractive farmland dotted with homesteads, arriving at the Marriott late afternoon. The following week Tom asked me if I wanted to join them for another "little walk." With time running out I declined.

By May 23rd I had made enough progress that I felt I could safely begin our trip south. Vicky had made all of the arrangements and was anxious to begin. By noon our rental car had arrived, and after giving Tom and Peter a partially completed draft of my report, we began our trip to Petra. It was a beautiful day. I began by driving west to link up with the trunk road heading south. However, I missed a turn and before I knew it, I was lost wandering around the western part of the city. At one of the suburban shopping areas I found a bookstore where an attendant told me how to locate the road I was looking for.

The road was modern, well maintained, and not heavily traveled. At first we passed scattered farms and occasional villages that phased into grazing areas and finally dry, barren land. The turnoff to Petra was well marked and before long we had checked into the

Movenpick, a lovely German hotel adjacent to the Petra site. The last part of our trip, with its dusty landscape had whetted our thirst. So, it wasn't long before we were seated in the main lobby savoring a 16-oz glass of German beer. Back in our room Vicky rested and I continued working on my report. I still had a lot to write before I would be finished. That evening Vicky got the bartender to serve us Tanqueray gin along with a side of vermouth that she turned into martinis for two. We finished the evening with an excellent meal in the hotel's beautiful diningroom.

We spent the next two mornings exploring this ancient ruin. Access was down a long, narrow passageway with stone walls rising high above us, called the *siq*. It looked to me like it was washed out over the years by torrents of water through the sandstone opening. But this was not the case, it was just an opening of natural stone. Upon reaching the base, we entered an open area 75 meters across in which the wall facing us had carvings that resembled the fronts of buildings. One of these false fronts was called the Treasury. Inside the Treasury we found an open area with beautiful stripes of red, purple, and pink that looked as though they were painted, but were the minerals embedded in the sandstone. As we continued along this base of loose sand and gravel we passed an amphitheater carved in the rock to our left, then more structures that resembled building fronts. The effect was deceiving because it seemed as though one could walk behind the fronts except no rooms existed. What we saw was akin to a Potemkin village. We ended our walk where the area open up with Greek-like columns well off to our left. There was much more to this historic location that I won't try to describe, except for the following event.

After having walked this uncomfortable base for about an hour, Vicky grew tired and hailed a camel driver with his Arabian headdress, cloak, and daring do to say she wanted a ride back to the Treasury. I would walk back and meet her at the base of the *siq*. During my return I stopped for a cup of mint tea at one of the spots carved into the side of the rock and shaded by

⁵ Some of these details come from a Nova TV program entitled A City of Stone.

a thatched roof. Sipping the tea I rested and watched the crowd pass by. In time, another camel and his "whirling-dervish" driver stopped at the railing in front of us. The driver got off the camel, tied it to the railing, and ordered a Pepsi Cola. When it arrived the driver popped the lid of the can and give it to the camel who gripped the can with its teeth, wrapped his huge lips around the top, tilted his head back and drained it, even munching on the can as though to get every last drop. The camel seemed to recognize the word "Pepsi." I couldn't wait to tell Vicky what I had seen. We rode a horse-drawn cart back up the *siq* to have lunch after which Vicky rested while I worked on my report.

After four days we checked out of the hotel and headed for the small town of Aqaba. To get there we passed through open fields with herders tending their sheep, then through dry land until we hooked up with the trunk road. By now we began looking for a filling station since we hadn't

filled up since leaving Amman. But we found none. So, when we reached Aqaba without running out of gas we breathed a huge sigh of relief. We circled the square, drove down to the beach and back, and without difficulty found the Golden Tulip in the center of town where we had reservations. Upon entering the hotel Vicky quickly concluded that she didn't much care for the place. So, we asked around and learned that there was a Movenpick only a few blocks away. After checking it out, we found that we couldn't get the good rate we had at Petra, so we decided to remain at the Tulip. After dinner we drove down to the Gulf where we could see the lights of three other countries: Eilat bordering us in Israel, Taba in the Egyptian Sinai to the west, and the loading docks of Saudi Arabia to the south. Returning to the hotel, I got right back to work. By now, I was close to finishing the report, which was a good thing because time was running out.

After breakfast the next day we drove south to the Royal Diving Center 30 minutes away. Already the day was sunny and hot. At the center we rented fins, goggles, breathing tubes, and a wetsuit for me but not for Vicky because none fit her. Skipping across the swimming pool's tiled area to keep from burning our feet we jumped off the pier into the Gulf.

The water was crystal clear, calm, and a bit chilly, which made me glad I had the wetsuit. Vicky, not being so lucky, had to get out of the water a few times to warm up. We snorkeled off and on for three hours then had lunch at the pier's snack bar. We saw loads of anemones with tiny black fish darting in and out, which reminded me of our vacation north of Jakarta. The corral were beautiful and near the surface. We had the place all to ourselves! When leaving we still needed to find a filling station. One of the guys at the Center told us we could find a station a few miles south at the Saudi border. We drove there but found no such thing. Pursuing another possibility we took an alternate route, which took us 30 km out of our way. But still no luck. Finally, I approached an attendant at a roadside garage who told me where to find a gas station. Fortunately, it was on our way back to the hotel. So, we eventually solved this problem and could relax. We could only surmise that with so few stations along our route few tourists frequented this area. I worked the rest of the afternoon then when we went downstairs for dinner we encountered a large group of young tourists who were staying at the hotel, which confirmed Vicky's belief that this hotel catered to those on a limited budget. I returned to work after dinner, but was ineffective because I was sleepy and tired from being in the water so long.

Our second day at the Diving Center was just as nice as was the first time. That evening over drinks Vicky's patience with me had worn thin. As she sometimes does she got after me for working so much. "No one else works like you. They don't appreciate what you do! Yes, we've been on vacation, yet you're still working." I couldn't argue with her other than to say, "I have to finish my report." I still needed to write small sections on desalinization and groundwater recharges and the Executive Summary, which Tom had said was the most important part since "that's the only thing the Jordanians and AID will read!"

Trying to assuage Vicky, I strung out dinner as best I could talking about anything but work. Later, in our room, I worked as long as I could function. By now it was 10:00. So, I laid down for two hours, grew restless, got back up at midnight and worked till 5:00, making good progress this time. I rested for an hour, then worked until 9:00 when it was time for

breakfast. Luckily, by now I had finished the two sections and the Executive Summary. Vicky drove part of the way back to Amman so I could do the proofing.

By the time we reached the hotel I had the draft in pretty good shape and felt comfortable handing it to Tom when he knocked on our hotel door. I was particularly pleased that I had found a solution to agriculture's requirements for recycled water and the municipal and industrial needs for freshwater, which some had thought intractable.⁶ So, I was frustrated no end when Tom returned a short while later suggesting I make a few editorial changes, *without any mention of what I had thought to be so important*. Tired, sleepy, and frustrated I told him that "I was finished. You can make whatever changes you like!" The next day I said goodby to those in the office then arranged for a hotel cab to drive us to the airport, since Tom had not arranged that for us.

Synopsis of My Report

My task was to evaluate options for expanding freshwater in the Amman-Zarqa Basin for municipal and industrial use and expanding recycled water for farmers in the Wadi Zarqa and the Jordan Valley. The highest acceptable cost for providing freshwater would be 424 fils⁷ per cubic meter, which was the cost of delivering freshwater from the Desi aquifer in southern Jordan. The Highlands, which include Amman and much of the Jordan's population, lie east of the Jordan Valley; the Wadi Zarqa is the major conduit for recycled water from As Samra to the Valley; the King Aziz Canal flows along the east side of the Jordan Valley from the Syrian border to the Dead Sea; and the agricultural areas in the Valley are the Northern, Middle, and Karameh Directorates.

When I began this second assignment I was advised that both freshwater and recycled water were in short supply and needed to be conserved. But I found that by implementing the projects described below coupled with a gradual increase in freshwater consumption and the corresponding discharge of recycled water from As Samra that the shortage of freshwater and recycled water took care of themselves!

⁷ The Fils is one thousandth of a Jordan Dollar, which in turn was worth \$1.8 at the time of this report.

Following is a description of the aforementioned options beginning with freshwater deliveries followed by recycled water deliveries:

Northern Directorate Option: This option combines a component that would pump 57 MCM annually of freshwater from the Canal via a newly constructed pipeline to the Zia treatment plant in Amman and receive an equal amount of recycled water via a gravity line to be used by Directorate farmers. Because this area now receives 69 MCM from the Canal, it will have a residual of 12 MCM of freshwater that will be applied to citrus; the recycled water it receives would be applied to vegetables able to tolerate recycled water. Unit net revenues for the vegetables would probably be similar to those obtained by farmers in the Middle Directorate. Total annualized costs including pipeline and on-farm investments, O&M, pumping freshwater to the Zia plant, and any farm loss comes to JD24 million per year, which for 57 MCM produces a unit cost for freshwater of 426 fils per CM. This figure is essentially the same as the Desi upper limit of 424 fils per CM. So this is a possible option.

<u>Wadi Dhuleil:</u> This option involves building a 14 km pressure pipeline to deliver 2.5 MCM annually of recycled water to replace an equal amount of freshwater currently being pumped as part of the Dhuleil Irrigation project. All of the area being irrigated is expected to have yield increases because the groundwater that this replaces has become much more saline than the recycled water delivered to the area. Skipping the details, the annualized costs total 967 fils per CM, which far exceeds the Desi option and therefore is rejected.

<u>Greater Wadi Dhuleil:</u> Similar data with somewhat different details produces a cost of 606 fils per CM. Consequently, this option is rejected as well.

Highland Industrial Area: This option involves constructing a 17 km pressure pipeline to the Hashemite-Rusefieh-Zarqa area primarily to serve the cooling requirements of the refinery and the two power plants. Total recycled water requirements would be 13 MCM to replace an equal amount of freshwater now being pumped from the Amman-Zarqa aquifer. Because the salinity levels are high and industrial specifications for cooling water are also high, the affected industries would bring the salinity levels down to standards similar to those required of freshwater for municipal use. Pumping and treatment costs of well water would be the same

whether used for industrial cooling or for municipal consumption. But the recycled water must be treated, probably as part of the pending As Samra expansion and upgrade. Total annualized costs of the pipeline investment, O&M, and pumping are JD1.8 million which, divided by 13 MCM saved each year gives a total cost of 386 fils per CM, which is the lowest of the four freshwater options.

These calculations reveal how recycled water can contribute to increased supplies of freshwater for municipal and industrial use; they also reveal the wide spread of costs, ranging from 386 fils per CM to 967 fils per CM. If the Government assigns the highest priority to replacing freshwater with recycled water, it would use recycled water for industrial purposes. Generally, this use requires small quantities of water per unit of output, except for canning vegetables so that the absence of an adequate supply comes at high economic cost in terms of national income foregone. While the Government has a social obligation to assure that farmers are not denied the water they are accustomed to receiving, it should be aware of the inferior productivity of water when used in agriculture.

The next part of the report dealt with calculating the annual net return for recycled water delivered to the Directorates. All deliveries were justified from the national and farmers' perspectives, the highest value being in the north and the smallest value in the south.

Northern Directorate: This section focuses on the agricultural component, since its other aspects have already been covered. With changes in the availability of recycled water and the crops grown, the affected farmers would experience a small loss. However, this result is sensitive to the values used in the analysis. For example, by making the results more favorable (i.e., lower costs or higher revenues) by just seven percent the farmers earn the required 10% rate of return. Such a small increase in net benefits, given the crudeness of these estimates this conclusion is within the margin of error. So, rather than abandon the farmers of this directorate over such a small loss, prudence suggests that they continue receiving water, albeit recycled instead of fresh.

Middle Directorate: Government action concerning this option is to allow these farmers to continue receiving the 6.0 MCM of water annually that it now receives, and assuming that the

recycled water is as productive as the freshwater it currently receives. So, the farmers are left unaffected. Therefore, no additional costs are involved and this alternative remains viable.

Karameh Directorate: By being at the tail end of the KAC this directorate receives the least amount of water with the lowest degree of certainty, which helps explain why the annual net returns here are the lowest of the three directorates. To make up for this condition farmers in two of the areas have resorted to pumping from the saline aquifer below them and from the drainage ditches. Farmers in one of the areas have their own freshwater sources, which required building a six km pressure line. In estimating net annual returns from this situation, which were JD 3 million, I relied on the same unit estimates of benefits as those of the Middle Directorate. Returns to a hypothetical sharecropper indicated that such a person might earn an income slightly above the rural income of an average Jordanian while giving the land owner a 15 percent return on his investment. I considered both acceptable.

<u>Wadi Zarqa</u>: Results were also positive, which were informative but not critical since recycled water would be available to farmers free of any investment, since the water passes by the farmers' fields on its way to the Valley. By now the Government has given up trying to restrict farmers from applying this water to vegetables even though such application is detrimental to the country's interests, both domestic and abroad.

The final part of this report comments on how these options might be combined. To gain a feeling for the magnitudes involved I looked at the relationship between growth in municipal water use and discharges from As Samra. Critical to this relationship are the assumptions of population growth for the Greater Amman-Zarqa area, the assumed increase in per capita water consumption, and the gap between the municipal water consumption and recycled water discharges. Of the options, the Northern District would save the most freshwater at 57 MCM per year. But extractions from the KAC must wait until an equal quantity of recycled water becomes available for the farmers there, which our projections show would not occur until 2015. By this date the 57 MCM could be applied directly to meet municipal demand while Highland groundwater pumping for municipal purposes could be reduced by an equal amount thereby benefitting the Highland aquifer. The Industrial option yields the next largest supply of recycled

water, doing so at the least cost. Finally, deliveries to both the Middle and Karameh Directorates show good economic returns. Because of the diverse effects of these scenarios we have chosen not to suggest one over the other thinking it better that the "key actors" decide how to proceed.

In addition, the report contains supporting tables of which four relate to the value of water, two relate to investments, and one calculates rates the return for a hypothetical farmer and a sharecropper. One table projects freshwater demand in the Amman-Zarqa watershed and another projects discharges from As Samra. Appendix tables show net revenues from cropping in the Northern, Middle, and Karameh directorates, each from the national and farmers' perspectives. And tables, based on the Forward reports, show land devoted to vegetables, cereals, citrus, bananas, other fruit, and nurseries according to location and season of the year, as well as revenues and production costs for each of the vegetables. These tables facilitated my choice of crops and cropping patterns by directorates and aided my choice of representative cropping patterns in calculating the net returns. After reading this report Peter compared it to a masters' thesis and wondered if I planned to publish it. I told him, "No, that's just the way I do things."

Our Mediterranean Cruise.

Our flight to Istanbul took only an hour. Once outside the terminal we struggled with our taxi driver because he didn't recognize the name of the hotel. We thought this strange because it was the Hilton. Eventually we found out that the Conrad Hilton is simply known locally as the Conrad. Our room was nice, the hotel elegant, and the swimming pool, although cool, was spacious. Our three-day stay in Istanbul came off nicely, except for occasional problems. The next day on our trip to the wharf Vicky was accosted by two young men who tried to steel her purse. But, Vicky being *street-wise* saw it coming and was able to fend them off. We strolled along the waterfront with many restaurants from which to choose. Our freshly-caught fish along with the white wine we ordered were excellent. The lunch hour must have passed, because the place was not crowded and the waiters did not rush us.

Having seen enough we walked back through the narrow streets eventually arriving at the large enclosed market on the Bosphorus. I never knew what Turkish delights were, but soon found out with so many of them on display in the small stalls that they are simply candy. Getting back to the hotel meant taking a taxi across one of two bridges. This led to a minor hassle when we accused our driver was using the bridge furthest from our hotel. The next day we enjoyed a lovely trip up the Dardanelles towards the Black Sea, which gave us a chance to see the elegant residences along both sides. Then, we visited a mosaic church and the Blue Mosque, which is truly outstanding, and eventually got "trapped" into visiting a carpet factory (shades of our visit to the perfumery in Cairo.) The morning of our last day we took a tour that included the magnificent St Sophia and then the palace. From there our tour bus took us directly to our ship, the Crown Odyssey to begin our Mediterranean cruise.

After settling into our cabin and going through the typical safety routines, Vicky and I went on deck to stand by the ship's railing to watch our passage through the Dardanelles headed for southeastern Turkey. After that we met our table-mates, enjoyed the drinks, fine food and service typical of such cruises. The next day our first stop was at Ephesus, the site of the Ephisians, St Paul, and Mary Mother of Jesus. The following day we docked at the Greek Island of Delos-Mykonos. I went for a brief swam but wouldn't recommend it because the water was so cold. The next day was Santorini, another magnificent Greek Island formed by a volcano. The village was crowded with glistening whitewashed buildings with blue tile roofs high above the water. Of all the places we visited this was the most outstanding, however, none provided an access to where I could relieve myself. The following day we were at sea. Then on to Malta, an interesting place with a museum worth visiting. From there it was on to Italy where we began by docking at Sorrento with a quick look at Pompeii, Civitaveccchia for our overland trip to Rome where we visited the Colosseum and St Peters. The following day we docked at Livorno for the trip to Firenzi (Florence) where we took in the square and the bordering churches, which were well worth visiting. On the last day of this Italian segment we went to the Isle of Capri with the blue grotto where we heard stories of the small boats exploring underground caves, followed by a drive up the hill into a beautiful resort town. After that it was on to France where we anchored off Porto Fino for only a short while and on to Nice where we drove through downtown Monaco, stopped at a perfumery (again!), a candy shop, then for lunch where our guide had arranged for an outdoor meal at a villa. Sidling up to our group our fifty-ish female guide kept alluding to things sexual. I wondered if was this real Or was she just acting the part thinking that we expected the French to be like this? Afterwards we visited an art colony, where Picasso and other artists had lived and worked. Having had a full day Vicky and I skipped the Captain's Night.

It was afternoon when we arrived at Las Palmas in the Baleares. Over my objection, I finally caved in to paying the "fixed" taxi fee to get us into town, which was over twice what it cost us to come back. We visited the National Palace and a church, then had *sangria* at a sidewalk café. Back onboard ship we packed up ready to dock in Barcelona the next day. By mid-morning we had checked into the Meliá, a Spanish international chain of hotels. We had a nice room on the 17th floor with a good view of the city. For some reason we received preferential treatment. We never found out why. Most of the others from our ship had to lug their baggage on an elevator that took them to the sixth floor. As soon as we got settled we arranged to visit an historic church and another one designed by Gaudi that was still under construction . . . and likely to remain so for years to come. That evening a concierge helped us locate a "tapas" bar. This one called the *Cerveceria Catalonia*, was a lively place. The next day we took a taxi to the *Parque de Guell*—an amazing place designed by Gaudi that contained his home that had been turned into a museum. We spent several hours there because there was so much to see. Then back to the *cerveceria* where the place was just as crowded and enjoyable as the night before.

I arose early the next morning, bought a local newspaper so as to test my Spanish and get a glimpse of Catalán, walked the streets, located an Italian restaurant where Vicky and I would later have lunch that included a pitcher of *sangría*, and in the afternoon took in a bull fight. Some of the events were good, some not so good, and one dismaying because one of the participants revealed his fear of the bull! That night we packed, made it to the airport in the wee

hours of the night without trouble, caught the Lufthansa flight to Frankfurt and then a direct flight to Denver where we cleared customs, a first time when arriving from Europe. By 11:00 p.m. June 18, 2001 we were back home after another interesting trip. The next morning we were surprised and disappointed to find the area north of us had been cleared and graded ready for development.

In my correspondence with Cusack after we returned home I explained my grouchiness when we got back from Aqaba by saying that I had worked practically all night to finish the draft report. Therefore, I was tired and not thinking straight when he asked me to make a few corrections to the draft and I told him to do that himself. He in fact did make the corrections, which he sent to me for my reaction. By return mail I said I thought they were fine. In the end he thanked me for taking the time to look them over and said he appreciated the work I had done. I was glad to have this fracas behind me.

Throughout these two assignments I enjoyed being in Jordan—at the office, in the hotel, on the streets of Amman, and the trip to Petra and Aqaba. Vicky and I sensed no animosity toward us as Americans. But look at these examples from the front-pages of *The Jordan Times*, a daily newspaper written in English: *Arafat denounces Israeli escalation; Palestinians mourn birth of*

Israel; Israel launches massive air and sea attacks on Gaza; Israel deploys tanks and razes Gaza area; Muslim world aims for united front against Israel; and so on. So, some of this animosity, at least among some, must lie below the surface. Even so, King Abdullah maintains good relations with President Bush receiving substantial technical assistance and financial aide. But I forget that Israel occupies Jordanian property west of the Jordan River.

I asked Vicky to write the following:

Breakfast at the Marriott

My routine had already been established. Around 8:45 I would have breakfast from the buffet by myself, since Bill had already departed for work. Usually, an array of juices (orange, prune, other) was available along with yoghurt (plain or mixed with blackberry, cherry preserves, and coconut). Also available were fresh fruit such as apples, pears, peaches, grapes, watermelon, and cantaloupe and dried fruit such as prunes, apricots, and figs partially reconstructed. The choice of cold foods such as yoghurt, sour cream, cucumbers, tomatoes, two types of olives, cheese,

meats, and "fixins" were grouped at one end of the displays that included a large copper pot of ful with a long-stemmed ladle. One could order eggs cooked as directed. Most often waffles and pancakes were offered, though we found them heavy needing salt and therefore not to our liking. From time to time egg rolls and sambusas were there and most often potatoes, steamed tomatoes, lightly cooked zucchini, carrots with cauliflower, and red and green peppers were offered along with hard boiled eggs. The assortment of bread and pastry included croissants, pita bread, muffins, French pastries, and various types of freshly baked bread that seemed endless.

A Typical Weekend

Sometimes tour groups would be there. If I saw them checking into the hotel the night before, I would be sure to take breakfast earlier. Usually there were businessmen eating alone

or occasionally in small groups having a "breakfast meeting." Languages most often heard were Arabic and English. Tour groups seemed to be Italian mostly but French came in second. I also found it interesting to watch the local men who would bring in their families. The Jordanian women dressed in their colorful and flowing robes would "pig out" by piling their plates high with all sorts of breads and pastries.

An Englishman orders a Spinach Omelet

One morning, a very British man, who looked to be in his late thirties, neatly dressed in a well-tailored grey suit, tie, and white shirt was seated not far from me. He had evidently ordered an omelet, but refused the one the waiter had placed before him. The waiter went back and came back with a second omelet, which the Englishman refused again. This time the conversation aroused my interest. After a few more minutes the waiter produced still a third omelet. This one larger and more beautiful than the previous ones presented by the chef in the presence of the head waiter. Still the Englishman refused saying, "No! I asked for a spinach omelet. Spinach omelet. Do you understand? It is green. Spinach is a green vegetable." As I left the scene I could see the consternation on the crew's faces. Then I heard a frustrated "Oh, never mind!" It wasn't until I was in the elevator on my way up to my room that I realized the source of the problem. I had just witnessed a real-life episode of John Cleese's Faulty Towers at its best. Obviously, the waiter was bringing the Brit a Spanish omelet. Each one perfectly prepared and larger than the previous one. When one thinks about it, how easy it is to misunderstand someone or something when trying to communicate in a language not one's own. Considering the myriad of opportunities for confusion, it's a wonder more incidents like this one do not occur. Imagine what it would be like if we westerners tried to communicate in Arabic.

Version 6 10/18/17 **Chapter 26: Closure**

In January, 2000, prior to my first trip to Jordan, Pepe Salas asked me if I would help Tim Gates of the CE Dept concerning a joint venture with the IICA¹ team in Lima. This was to be a return to an activity of some years earlier in which Tim had established contact with this same group. Having the interest and wanting to help out, I readily agreed to leave within a few weeks for a ten-day stay in Lima. Except for the success I had in working with Lorenzo Chang, formerly a Peruvian official high up in the Ministry of Agriculture whom I had met before, this whole affair was a fiasco. The small IICA team in Lima was in the process of bidding on a project to help privatize the Peruvian Extension Service in assisting small-scale coastal irrigation farmers. The IICA team under the leadership of Luis Ampuero was well on its way to finalizing its proposal, but still wanted technical input from another organization. Looking back at CSU's earlier contact with Gates, and knowing Pepe's status, Luis had contacted them for help. Thus, my involvement. After I arrived in Lima I soon discovered the mis-connect when Luis's immediate superior informed me that CSU was expected to field several long-term staff with fluency in Spanish. When Gates was unable to provide such support, I was told that they were looking to an FAO² team as an alternative to CSU. Even so, he thought CSU had a role by offering short-term courses in irrigated agriculture in Ft Collins. I thought this to be an acceptable alternative that would at least give CSU an opening to irrigation activities in Peru. When I related these results to Gates, he reacted indigently by sending a reply to Luis expressing his dissatisfaction. Later, when I told Gates I thought this a mistake, he didn't think much of this either.

¹Inter-American Institute for Cooperation on Agriculture, headquartered in San Jose, Costa Rica.

² The UN's Food and Agricultural Organization.

In the summer of 2001 Jose Hernandez of ATA in Lima asked if I would give lectures on project planning and pricing of irrigation water. Arturo Cornejo, who I knew as the former Dean of Agriculture at La Molina was now advisor to IICA headquartered in San Jose, Costa Rica, would be my contact. I had lectured in Spanish in Peru several times before and could refer to my earlier notes. But I was unsure if I could handle five hours a day for a whole week. So, I contacted my Chicano barber, Carlos Solano, who suggested I join their Thursday morning group who studied the Spanish language. (That began an association that lasted until 2015.) I didn't think pricing irrigation water would be difficult, but I was wrong. When I searched the literature I found little had been published on this topic. Eventually, I made contact with Ariel Dinar of the World Bank who sent me his book on this topic; later I came across another excellent source³.

After the 9/11 bombing of the Trade Center, I became suddenly patriotic when I read about USAID's plans to spend millions of dollars to help Iraq recover its agricultural sector. Impulsively, I wrote to Yoder saying I was interested in participating with ARC. For awhile it looked as though they would accept my help. I even canceled a social night out so that I would be available to help Cusack at their headquarters in Burlington, Vermont. But the call never came.

I spent the next several months in Ft Collins preparing notes in Spanish for 18 lectures on Project Planning and Irrigation Water Pricing. I planned on handing out these lectures in time for the attendees to study them beforehand then follow as I was lecturing. In addition I had planned on ATA providing a knowledgeable translator who would sit in the front row, to whom I could refer when needed.

³ Dina, Ariel, Pochat, Victor, and Jose Albiac, 2015 Edition. Water Pricing Experiences and Innovations. Springer Nature Publishers, Berlin. Obviously, the edition I relied on, was much earlier; and Small, Leslie E. and Ian Carruthers. 2008. Farmer-financed Irrigation: the economy of reform. Cambridge Press, London.

Late at night on July 8, 2002 I arrived in Lima as ready as I ever would be for my week of lectures. An ATA driver took me to the Garden Hotel where I was to stay. The next day, a Saturday, I went to ATA headquarters where Charo, Arturo's assistant, was my only contact there. After giving me a welcoming kiss on th check,⁴ she said she knew nothing about my arrival nor had anyone reproduced the lecture notes that I had been sending. But she did know that about 25 would be attending my lectures at La Molina. The attendees would be mid-level engineers who worked for the Irrigation Department.

I somehow managed to get through the daily lectures that began at 9:00 and ended at 4:00 with lunch and coffee breaks in between. I began by following my lecture notes and relying on an overhead and chalkboard, but soon abandoned the notes, except for the two lectures on water pricing, since I had been teaching the planning course for years. The expected value component went over well enough in which I succeeded in getting a student to bet with me, first a small peso amount, who then refused at the hundred peso level thus illustrating the limitations to *expected values*. The work sessions using a spreadsheet format were popular, except few were able to interpolate to find the Rates of Return. Jose had wanted me to lecture on *shadow prices*, but I refused because I felt this required more knowledge of economics than these *engineers* possessed. Even so, when Jose took over the last afternoon one of his topics was shadow pricing!

That afternoon ended with champaign and hors d'oeuvres and speeches from a couple of dignitaries from the Ministry of Agriculture. On the way back to the ATA office Jose told me that the attendees, *for the most part*, were satisfied with the course, but added that he thought my lectures were *pedantic*. Later, I wondered if he meant this as a compliment, i.e., scholarly, or as a criticism, i.e., overly concerned with minutia. Riding in the car with us was Charo who said that she and

⁴ This is a common mode here for friends to greet each other. Although this was our first contact, by working with the prestigious Arturo I qualified.

Marta, the office secretary, had worked till 2:30 a.m. the night before copying the rest of my lectures to be handed out this last day. What a gal!

The next day, which was Saturday, I prepared a note on water pricing that I had promised Jose and talked with Harald Fredericksen whom I had met earlier in the week. I was glad to have met Harald because he was a well-known figure in irrigation engineering. Thus ended my consulting in Peru. A week later, Vicky and I drove to La Quinta for Mike's marriage to Dana Carlson at the Indian Wells Country Club. A year later, Daven was born.

Back in Ft Collins Dick Tinsley said he would like my technical input on the first chapter on the book⁵ he was writing about small farmers in Asia, then a second chapter, and a third, until I had reviewed his whole book, which when published came to 585 pgs! Marilee contacted me if I were interested in a short-term assignment in Egypt funded by the World Bank in which I said I was, ARD asked if I were interested in a wastewater project in Jordan, CADI asked if I were interested in being chief-of-party in Jordan in which I said no because it was long term. But I did respond positively when Driss of CRS asked about going to Swaziland on a short assignment related to food security, which looked too good to be true, and later about heading up an evaluation team on development assistance in Malawi and Zambia. By then, it looked like I soon would be back in Southern Africa.

However, before I could leave on any of these assignments I contracted the shingles! At first when I checked with Dr. Sands he said he thought he had caught it in time. But that was wishful thinking, as the shingles became more intense and lasted longer than he had expected. By March, 2004 when Kenneth Polsky on behalf of Driss asked if I would consider the Malawi assignment in June I answered that I doubted I would be recovered by then. It was not until

⁵Richard Tinsley. 2004. Developing smallholder agriculture: a global perspective. AgBé Publishers, Brussels.

November that I finally felt well enough to work again. But when I informed Driss to that effect he said that "He'd keep my interest in mind." So, that took care of my involvement with CRS.

With little coming up on the consulting side, Vicky and I scheduled a skiing trip at Winter Park. We had discovered the Iron Horse close to the base where we could ski in and out. We arrived on Jan 31, 2005 and for this day and the next I was able to get in many good runs in which the skiing conditions were excellent. On the second day which was sunny and warm I skied all morning without bothering to drink enough liquid to keep from being dehydrated. As a result after going to bed that night I felt a mild pressure in my chest that built up to the point where my pulse was racing and my blood pressure was 184 over 146. Because emergency doctors were not close by, Vicky drove me to Granby where such a doctor was on duty. I was experiencing my first case of atrial fibrillation. After getting these readings under control, I was loaded into an ambulance and driven down the slope to the Saint Anthony's Hospital in Denver where I spent the night. This event at age 78 closed down my career as a consultant. I had had a good run. Now, it was time for other things.