Interview with Julius S. Prince

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An interview with Julius S. Prince M.D., Dr. P.H.

Interviewer: W. Haven North

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FOREWORD to "The Tennis Court and The Lammergeier”

The reader who embarks on perusal of this journal may certainly be forgiven for wonderment at its title. Well, if you will bear with me, dear reader, I shall now explain all, or at least lay out the context in which you may find justification for the title.

We (my wife, Nona, and 7 year old son, Tom), arrived in Addis Ababa (Addis) the capital city of Ethiopia, towards mid-morning of November 13, 1958, and I was immersed almost immediately, as you will see, in trying to help the Ethiopian Government Ministry of Health in dealing with an almost unimaginable catastrophe - a monstrous malaria epidemic which, as events soon revealed, had already caused over 100,000 deaths in certain parts of the Ethiopian Highland Plateau in approximately the previous four to six weeks! (Annex 1)

This ineluctable event in effect set the context for most of my efforts to meet the requirements of my job as Chief of the Public Health Division of the Ethiopia Mission of the U.S. International Cooperation Administration (ICA), (in a few years to be known as the U.S. Agency for International Development, U.S. Mission to Ethiopia (USAID/Addis Ababa)). The assumption, perforce, of this responsibility conveyed to me not only the appropriate sense of urgency, but also a keen awareness that assisting the developing

countries of the world, and particularly those in Africa, would most certainly require a very long-term effort. This would be especially true if we were to prove helpful in dealing with some of these extremely urgent health problems.

I rapidly arrived at the conclusion that I would have to think through the needed cooperative effort in terms of something much wider than the straightforward problem of controlling communicable diseases. What I had seen during those first few days on the Zuquala Plain - only some 30 kilometers from Addis - was of such an overwhelming and all-encompassing nature, involving all aspects of life, history, development, and health hazard possibilities, that mere efforts to suppress the epidemic could only be a palliative “scratch on the surface.” It was then that I realized the problem was, conceptually, far beyond my comprehension.

So what I have tried to do, in presenting the allegory of “the Lammergeier and the Tennis Court,” is to seize upon a series of events which occurred during the first few weeks of our residence, and then about nine years later, on that fantastic “flying carpet” of the African Diaspora, “The Land of Cush” or today's Ethiopia - at least to set the stage for the extraordinary events which followed at the beginning and at the end of our stay.

Thus, while we were still in residence at the Ras Hotel in Addis during our first few weeks there, we noticed that the chef always managed to cook up generous portions of something like squab on certain days of the week. In fact, the birds were, in some degree, like the Cornish game hen of famed reputation on the dining car of the New York Central Railroad's outstanding 20th Century Limited, at the zenith of its glory days. We thanked the chef and asked him where the birds came from. He was most pleased to know of our appreciation of his culinary achievement and, in addition, said that the squab came from a field not too far away, called Bol#.

By this time my son Tom had been duly enrolled in the German school in Addis where he could, we hoped, come to meet interesting Ethiopian students his age and become

more familiar with their culture and language as well as study German, as I myself had while at high school. Tom, being a clever young lad, and, at the age of seven, able to "produce" linguistic sounds such as the "explosive" pronunciation required for some Amharic (Ethiopian) words, moved ahead rather rapidly, albeit with considerable effort on his part, to some understanding of the Ethiopian (Amharic) language. Consequently, in a few weeks, at our request, we were able to ascertain that the squab we had been enjoying were the result of a highly successful hunting effort by a young Ethiopian gentleman by the name of "Roba," to whom we were duly introduced. Tom then understood enough of what Roba described concerning the "hunt" to realize that he was indeed an expert at hunting pigeons, having gathered all these fine birds with a slingshot! Furthermore, Roba agreed to help Tom learn how to hunt with a slingshot himself and went ahead and made him one and, in due course, began teaching him slingshot "marksmanship." Pretty soon the two of them would go off on a hunt together; and that was the beginning of a remarkable relationship between Roba and the Prince family. In fact, when we rented our large compound in Gola Sefer (pronounced Golah Sufur), Roba and his family were invited to move into a tukul (mud and wattle hut) on our compound, and he was to serve as our general on-site handyman and unofficial "guard," as needed for example, when Nona and Tom would go off for a weekend camping trip about 60 kilometers down the road to a place called Lake Langano. This lake was located in the Rift valley chain where the fishing for talapia was excellent. Tom took full advantage of this fact to keep the larder well stocked in camp and at home.

Tom had always been interested in all kinds of animals, birds, butterflies, etc. and soon began collections of these when we moved into our "big" (approximately 4 acres) compound and, the first thing you know we had a pet dik-dik (small East African antelope), then a serval cat and then, one day, Tom decided he had to have a vulture! He had seen so many of them gliding gracefully over the house, maybe two to three thousand feet up, and wanted to see one close up. So Roba offered to show him a lot of them—down at the Addis slaughterhouse on the outskirts of town where the municipal offal was

disposed of by leaving it in the nearby fields for the vultures, to consume, as indeed they did expeditiously - there being many hundreds of them! But that wasn't enough. Tom had to have some of these birds in our compound to observe and feed! This “demand,” thought truly constructive for Tom's rapidly growing interest in the ecology of the country, was met, I suppose, by doubts about our sanity on the part of those who observed what must have been the first aviary on any AID officer's compound, designed specifically to house a quite large number of (about 20) assorted eagles, fish hawks and vultures!

In a few weeks, it was done and ready to receive its first “vultures in residence.” Tom went off with Roba and one or two other “staff,” each armed with the essential slingshot needed only, on this occasion, to stun the chosen birds so they could then be tied up and brought to their new “home.” This temporary “tranquilizing” of the designated bird was definitely needed since, quite obviously, none of them knew “what the plan was” and were not about to come willingly. Their armament for resistance was considerable (huge claws and beaks), not to be tampered with. So “tranquilizing by means other than war” was necessary and took the form of a not too “final” but sufficiently severe clout on the head with a fair sized stone, delivered by sharp shooter sling-shot-wielders like Tom and Roba.

A long story shortened - in several weeks we had a “full house” of vultures including one huge bird, with a particularly ugly great black beard, hanging straight down from the middle of his enormous and nasty looking hooked beak! This was our Lammergeier and although I didn't witness the procedure of getting him into the cage, and the other “admitting formality,” i.e., clipping his wings so that he wouldn't hurt himself trying to fly out of a steel cage, he took after both Tom and Roba more quickly than they could exit the cage, leaving assorted talon and beak marks as mementoes of the encounter. When I saw him that evening he was still angry and mean but somewhat mollified, perhaps by his “private room” and by the fact that he was well-fed indeed, as his first “consolation prize,” to be followed by many more in the six or seven years of his “residence” with us. And of

course, as this went on and he found himself being very well attended to and then loved by our Tom, he mellowed up extraordinarily.

As a result of all of the above happenings, and another, which was not accidental having to do with the need for our departure in mid-October 1967 to a new assignment in Washington, all the vultures had, of course, to be released unharmed or hindered in any way.

One of the first aspects of this procedure was to let the clipped wings grow back and give the vultures a chance to practice flapping their wings and even flying a bit around the compound, until they were really ready to “take off,” which they eventually did. But some of the birds required special attention after such a long confinement. For example, we wanted to make sure the Lammergeier was strong enough, with his great weight and size, so that he would not have to make an “emergency landing” in any of our neighbors' front yards! So, a few weeks prior to my departure for a meeting in Kampala, Uganda, related to my Washington assignment, we got “Lami” (our Lammergeier's pet name by that time) out of the cage and released him in the tennis court, which was equipped with a very large hand-operated roller. This made an excellent perch for Lami to sit on and train himself, flap his wings, and gradually get his strength back. The court, being of tournament size, gave Lami plenty of room to practice short flights from his perch on the roller, then gradually over the tennis net and, with even more confidence, some flights several times around the inside of the court. So it was, that on a beautiful dry season evening just before leaving Ethiopia for my new post in AID/W [AID/Washington], as we watched the sun setting in the gorgeous canvas of orange and golden light behind Entoto Mountain, Lami flew a few more times around the tennis court, each time a bit higher, and then finally in triumph, perhaps, over the fence, then around the compound a few times, gaining more altitude with each swing, until finally he got into the full rhythm of his powerful flight and headed straight for the rainbow on the mountains! How could I ever forget that moment—no, I never shall—for this was when I hit on the title for this journal—having no idea when or if it would ever take shape. So here it is dear reader, for your enjoyment I sincerely hope, but also, perhaps,

for your instruction and encouragement, to follow in whichever of these footsteps you may wish to tread or not, as the case may be!

—Dr. Julius S. Prince M.D., Dr. P. H.

Q: This interview is with Dr. Julius S. Prince who has been with international development for many years and has been a pioneer in international health programs in developing countries, principally Africa. I suggest we lead off, Dr. Prince, with some background information on your birth date and place, family, schooling that relate to your interest in international development and health programs. In sum, what led you to work in international development?

PRINCE: I think this is a very interesting idea. It is important because I have a feeling that there has not been much emphasis placed on the background elements in peoples' lives that get them interested in doing this kind of work; much less in doing medical or any other kind of work involving the satisfaction, of health-related needs, both social and physical, of less-privileged populations, as a major objective. You need to go back quite a distance to get some of the flavor of the scope of that question.

In any case, the early “Chapters” of this Journal will at least sketch in some of these objective background elements in any personal decision-making process. These played a large part in our decision to undertake this kind of “Odyssey”, in spite of its many unknowns, especially for our “little one” who we nevertheless did not feel we could possibly leave behind. It would have been too crushing a burden for him and for us! So we decided to face whatever hazards came our way knowing that almost all married personnel bring their families to overseas posts, wherever they may be, for the same reasons I have just voiced. So the post family support systems were quite well developed, in addition to those from our hosts, which we now found were most thoughtful and helpful. (During our service overseas, Foreign Service Reserve Officers working with the USAID's,

were always to consider themselves as “guests” of the “host country” in which the USAID was located—a philosophy which was felt most congenial for all concerned.)

Family Background

In my case I believe the background elements I've just described albeit mostly with a broad brush go way back to the fact that my father was born in Germany and came to the US about 1877. I couldn't find his name at Ellis Island to confirm a more accurate date but the list was huge and my time for the search limited. His wife was born in the U.S. but she was also, apparently, of German extraction; so my family was quite Germanic and my father very much so! But there was a great deal of love and an extremely strong family relationship among us. My Dad, also a bit of a martinet, used to “blow up” (as we described it) when he was annoyed about something or other, and then he became very apologetic when “the storm” had blown over. Anyhow we had that kind of a background. Also, in the family, there were four kids. I was the only boy, and the youngest sibling as well. (”hen pecked?” - Depends on how you look at your loving sisters' frequent advice and direction!)

My Mom became interested in nursing, from a non- professional point of view. She read the “Merck Manual” which was about that thick (shows 1 inch) That was a pretty good size, almost a pocket size book. (There is no way you could carry the “Merck Mediguide” around now in your pocket book.) She always had a well-stocked medicine cabinet as well. To give you some idea of how important her care of the children was to me, one day in a misguided moment at the age of about 5, my father asked me at dinner-all of us were there-”Bud, who do you love best in the family?” So I said, “Mommy, because she gives me such good food to eat and takes such good care of me when I am sick.” This didn't go over very well with “Vater” (German word for father). Be that as it may, I think Mom's interest in medical things rubbed off on me to a considerable extent. Had my Vati realized that possibility at the time, he might have felt better about it, since it was clear that he had aspirations for his only son that seemed to far exceed his prospects. Thus, had an

interest in medical matters clearly been on the horizon, however remote, he might have been encouraged to think that his hopes for my station in life might eventually be realized.

Early Years

Q: When were you born and where?

PRINCE: I was born in Crestwood (Yonkers) New York on July 21, 1911. For some years we lived in Crestwood. It was some distance outside Yonkers, but in the same general area. And then, in 1914, we moved to a house in New Rochelle, New York, which my Dad was able to buy at auction. It was right on Long Island Sound - the Upper Harbor of New Rochelle, called “Echo Bay” - because sounds from the boats (horns, claxons, etc., to call the tenders from the yacht clubs), voices, music, etc. echoed beautifully from the gently sloping hills around the south side of the harbor.

I should say that the reason my Dad was able to do all these things was because he made his way up, when he got to the U.S., even though he and his family arrived with little more than the clothes on their backs. He emigrated in search of the freedom of thought and beliefs associated with life in America, and not just for the financial opportunities. My Dad was only about 12 years old when he got here, so he had to work his way through school, delivering newspapers and all this type of thing, which you read about happening with kids in this country “in the old days.” (Yes, often enough today as well!)

Q: Where did he go to school?

PRINCE: He went to public schools in downtown New York City, over on the East side. He soon became a very good student and was able to get into the College of the City of New York (CCNY). In those days it wasn't an “open admissions” kind of situation; you had to pass all of the entrance examinations, as in most universities in the U.S., then as now. He paid for the last part of his college education by teaching Manual Training in the public schools where he had been a student. And with that, he graduated in 1889, second

in the class! The only reason he wasn't first, he told me, was because he couldn't draw freehand to save his neck; and he passed that weakness on to me. I suppose that's why my handwriting is so miserable and why I can't draw a picture with any kind of perspective. But his diary indicates that he worked terribly hard to achieve that outstanding academic level—so it became background to what he thought his son should achieve as well!

Q: Where did you go to school?

PRINCE: I went to Trinity Public School in New Rochelle (Trinity) until I got through the seventh grade. And then to a private school for more rigorous teaching. But before I get into my education, etc., I want to say what happened back then and how my Dad made his way to the point where he was able to buy the house in New Rochelle. For the things that happened in my Dad's career later were, I believe, very important to the development of my own career and character. So I will come back to what I did and where I went to school, and, so forth, in due course.

My father turned out to be a brilliant mathematician. In fact, he received a gold medal for placing first in mathematics in the CCNY class of '89. He was also elected Phi Beta Kappa, and decided to go into engineering. He went on to earn his engineering certificate from CCNY, and his CE [civil engineer]. degree a few years later from Cornell University. What happened to him after that, much later on, left its mark on me; a permanent mark. These events occurred about as follows: my Dad, of course, was looking around for a job after earning his engineering certificate from CCNY, and couldn't find one right away. When the opportunity arose for him to be an apprentice civil engineer for the Duchess County Branch of the Central New England Railway north of Poughkeepsie, he accepted with alacrity. But he didn't realize what he was getting into when he went up there. They put him to work on something that made him quite well-known in the profession and gave him the boost that he needed to “get places.” But it was a physically and personally demanding life, as indicated in his diary!

I don't know whether you are familiar with the great bridge across the Hudson River at Poughkeepsie which was used to carry the Central New England railway across the river to the Lehigh and New England Railroad, and, thus, provide a rail route bypass of New York City for freight and passengers. He helped design and supervise the construction of the supports for the approaches to the bridge; he did not design the bridge, only the supports, the pillars and foundations for the right-of-way as the track approached the bridge. He spent a lot of time on that and worked in all kinds of weather, outdoors living in tents, etc., as civil engineers often must do.

And then when he finished that job (the Hudson River Bridge approaches), he decided that it was pretty rigorous and especially that it didn't give him enough time to spend with his wife and his family. About 1903-05, after completing his CE at Cornell, he started working on the construction of piers for buildings; but, according to his diary, it was “monotonous”, so he decided to quit engineering altogether and enter the business world.

As a businessman he made his way up very rapidly in wholesaling of all kinds of kinds of clothing materials. This was highly profitable in those days, so he did very well for himself and for his family and was able to boost himself rapidly from a personal social status and financial point of view. He was able to buy one of the first automobiles, even before the Ford Model T became available. In fact, he was always interested in all things mechanical; and, along with his engineering experience and the money from his business, was able to do pretty much whatever he wanted. He even put together an electrically powered overhead shaft and belt-powered machine shop, had it erected in our garage in New Rochelle, and in due time I became its chief engineer!

At the time we kids were all there in that beautiful and fascinating home complete with the mentioned machine shop, hand cranked telephones, and many other state of the art wonders! So we were, on the whole, a happy family, and for me especially, it offered an opportunity for a marvelous life, even though I always remember my Dad's somewhat choleric temperament. For example, I wasn't very good in arithmetic in school. So he was

inclined to tell me, when I came home with a mediocre report card, “Well, Bud, someday you may surprise me!” So, of course, that gave me a feeling o“not being very high on the totem pole;” but I guess it didn't have a negative effect in the long run; maybe it just made me want to do better. Anyhow, aside from that, the relationships in the family were absolutely full of love, even when my Dad flew off the handle. For example, on one occasion, when we were on a trip out West, about 1920, he got mad at my eldest sister, who was named Helen. And she was a beautiful and wonderful person, probably the most wonderful person I have ever met, next to Mom. And she didn't cry, but I did! I bawled like the dickens and my Dad felt terrible about that. I remember very well the way he looked at me; in a sort of extremely apologetic and loving fashion. And that made everything okay again, between all of us!

But my love for Helen was very deep. And it had a lot to do with my going into medicine, because when she reached the age of 20-22, there occurred what was for us a terrible tragedy. She contracted severe streptococcal pharyngitis complicated by acute appendicitis; and the appendix ruptured and she died (There were no antibiotics in those days.). She was at the beginning of a very promising career as a poet and had already written some absolutely beautiful sonnets; but so suddenly; she was gone. My Dad took me outside that night and said, “You see that beautiful bright star up there?” He pointed to the sky in the Northeast, down the Sound Long Island Sound, about 120 miles long, running between Long Island and Connecticut and Southernmost NY, to the Atlantic Ocean to the East, and the East River and NYC to the West. New Rochelle harbor (Echo Bay) opens directly onto this body of water, and from our house (now property oNew Rochelle one can look all the way down the Sound toward the Ocean) and I thought I did see it and said so. Then my Dad said, “That's Helen, and she'll always be with us.” But even now, I still miss her! I was also impressed that she had a very wonderful young man as a fiancee; and the effect this tragedy had on him was really devastating. So I thought to myself, “you know, this is terrible. Here is this wonderful woman; no earthly thing more could have been done to save her; but it wasn't enough, because we didn't have any way

of controlling this infection that she got." And I think that had more than anything else to do with my decision later on to study medicine—maybe the kind of thing, I believe, that happens more frequently among people following a medical career, which we only find out by less structured means, e.g., spontaneous recollection, reference to similar events among members of the same family or other relatives, etc, as in this case.

Early Education

Q: What happened to you at this time; where did you go to school?

PRINCE: As I said, we moved up to New Rochelle in 1914 and I started at Trinity (that would have been circa 1916-17) And one of the things that happened concurrently was that the family began to travel quite a bit around the country. In fact in 1914, we went down to St. Augustine, Florida, for a few weeks. That was my first railroad trip and, of course, my Dad, having been a railroad civil engineer, was very interested in encouraging my interest in railroads, as well. He encouraged me in every way that he could, even at that very young age. And that is probably why I have become a life long railroad fan, from the age of three, as well as an amateur photographer. And that's also why I said, near the beginning of this narrative, that, when my Dad became a railroad civil engineer, it was to have a permanent effect on my life. It did, indeed, and to this day, I'm an ardent railroad traveler and enthusiast, Amtrak problems to the contrary not withstanding.

In school I didn't do terribly well. The only honor I got was for spelling, and that seems to have stayed with me all my life. But by the time I got to the seventh grade, my Dad thought that Trinity was okay but he said, "I think Bud ought to go to one of the really good schools for his secondary education." So he chose the Lincoln School of Teacher's College, New York City, at West 123rd Street between St. Nicholas and Amsterdam Avenues.

Q: Connected with Columbia University?

PRINCE: Yes, it was connected with Columbia University Teachers College as an experimental school. One of the experiments they wished to try out (even that long ago) was with respect to less directed education and more freedom for the students to “plot their own course.” Well I had been used to a Germanic environment, so that wasn't my cup of tea. I was used to being told to do things. Nevertheless, something that happened while I was at Lincoln, which was the result of this freedom of approach to the teaching of students, also had a big effect on the rest of my life.

What happened was that in 1924 or '25, my Dad decided we would all go to Italy in the late winter. He got permission to take me out of school, to go with the family to Florence, Rome, the Italian hill towns, with the proviso that I would observe carefully what I saw and would write a term paper on some aspect of it that I thought was important. I took a great many photos, and though they're mostly gone now, my interest in photography is still alive and well! I actually have some of these surviving photos here, and I've made copies of many others to use as illustrations for this entire document. I think they add greatly to its interest.

We embarked at New York on an Italian ship (Lloyd Sabaudo Line). For the information of other ship travel fans, the Lloyd Sabaudo Line (later named the Italia Line) ship we traveled on was the “Conte Rosso,” and we disembarked in Naples. On the ship there were a good many Italians, including some who were apparently very fond of Mussolini and his Fascist ideology. There was “Jovanetza” singing (A Fascisti-originated song, I was told, full of self-congratulatory phrases and lyrics praising “Il Duce”) going on all the time in the bow of the boat, where the third class passengers were quartered and were on deck for exercise (just forward of the forecastle) when the sea was calm. And all during the time we were in Italy it was clear to me that Fascism was getting into full swing. So I observed what I saw and wrote a quite lengthy and detailed paper on the subject of “Fascism in Italy, a Growing Menace.” My Social Studies teacher liked it so much that she gave me an A+ for the course and all the other courses were put aside for the three months of that

quarter that I was away. That was one advantage of Lincoln School; but I didn't learn other subjects as well as I could. And there were things like the course in pottery, however, which I wasn't the least bit interested in but was required to take. I did a miserable job with it, as I did with anything requiring manual dexterity—a problem I still have—so, of course, I'm not a surgeon and I can't type either, as the saying goes, “for love nor money!”

So my Dad decided that after I had been through two years of Lincoln School I should go to a more structured educational environment. And he suggested Horace Mann School for Boys as it was called in the '20s, a top notch preparatory school, in Riverdale, New York City. I applied and was accepted. And there I really came into my own and I did very well, particularly in general science. I should say that at Horace Mann, as in all schools in those formative years of life, the quality of the teaching is of the utmost importance. The name of our general science teacher, for example, waMr. Robert Payne. But we all called him “Bobby” and he didn't mind that at all. In fact, he encouraged us to be very informal with him. He would talk with us by the hour if we wanted to, about aspects of science. It was a marvelously stimulating experience. He got me interested in meteorology and so, one day he asked, “Mr. Prince, how about giving us a lecture on the preparation of weather maps; how weather maps are made, and how it relates to instruments for measuring the differences in the characteristics of the weather and the ability to forecast it?” I set about getting the illustrative material—weather maps, meteorologic instruments, etc.—together and gave an illustrated lecture to the whole class on meteorology and weather map preparation and forecasting. Bobby and the students all thought this was great. So, I guess, I had that kind of interest in doing what might be considered unusual things, in the science area, right from the beginning.

And then, because of my record at Horace Mann and a special “plug” from a much respected alumnus, who also happened to be my brother-in-law, I had little trouble in getting into the class of 1932 at Yale. But before passing to Yale, I must mention one other thing that I had a feeling for at Horace Mann...no, two things: one was the importance of modern languages: we didn't have to take Latin and my Dad was opposed to it as well;

he felt that I should, instead, “take a modern language.” So I said, “what do you think about German?” He said: “That's a great idea. It's good to speak German; you have had plenty of practice but you need to tighten up on your grammar.” So I took German at Horace Mann [H.M.] and French as well. And that was one of the best things that ever happened to me, for you can imagine how useful this has been in my travels and experience overseas, in West Africa particularly. The second item of great importance to me later, as it turned out, was the exceptional teaching of English literature, for we not only read a great deal but were encouraged to study carefully what we were reading, the philosophic background, etc.

So I went to Yale and, by my junior year, I had definitely made up my mind that I wanted to go into medicine. But, because of the interest stimulated by my teachers at HM, I did not wish to forego the opportunity to obtain a really good liberal arts education, particularly in literature and history, which Yale was famous for in those days. Professors like William Lyons Phelps, in 19th century English literature, Chauncey Tinker, in 19th century poetry, Henry Nettleton, in 19th century prose, Edwin Allison, in history of the Middle Ages. All those unbelievably wonderful professors! - I took full advantage of their courses. (You had to put your name in way ahead of time to be accepted for enrollment in their classes because they had found it necessary to limit enrollment in order to keep the size of the class to a reasonable level.) So I was very lucky. In addition, I was able to join the course given by Professor Paul Seymour, on “The Contemporary Political History of Europe;” can you imagine that?! My goodness, what a pertinent subject today! The books we used then are as a consequence, still relevant and they continue to grace the shelves of my library. And, of course, the diplomatic negotiations and their failure, that led to World War I, are very clear in my mind to this day and have so many comparative relevancies with what has been going on for many years past, and right up to the present, that it is a little hard to believe, and not very reassuring!

Q: Are you referring to World War I or World War II?

PRINCE: World War I. But then, also the antecedents of World War II, which was based on strikingly similar events in many respects (see Sidney Fay, The Origins of the World War, 1931) and the whole thing just came alive. It played a big part in my going into the foreign service and, pari passu, in my desire to become involved in diplomacy and foreign affairs. Was I thinking of international health at that time? No way—it probably never entered my head until much later.

Education in Medicine and Public Health

Q: Can you elaborate a little more about why you chose medicine?

PRINCE: As I said, I had this feeling of the dreadful loss of my sister; and not being able to do anything about it really got under my skin. It was a sad and urgent challenge to me and one that I felt I could not pass by and that, perhaps, my efforts could be of some use in tackling the related medical problems, e.g., in this case, the control of hemolytic streptococcal infections. Also about that time (the summer of 1928-1929), I went fishing with my Uncle Sid (one of my Dad's three distinguished brothers) on Rangeley Lake, Maine. He turned to me as I was rowing the skiff down the lake while he trolled for land-locked salmon and said, “Bud, what are you going to do when you finish college?” I said, “I know what I am going to do-I'm going to be a doctor. But I don't want to concentrate on the (clinical) practice of medicine, because what I really want is to work on problems like the ones that killed Helen and Leonard” (Uncle Sid's son). (The same thing, more or less, had happened to him. He contracted lobar-pneumonia and died at the same age as Helen.) I wanted to do research to find out what causes these diseases and see if I could discover some way of preventing or curing people when they get sick with illnesses of this type, rather than sit by their bedside and watch them die. The even more relevant idea perhaps, of working on prevention of illnesses rather than limiting the approach to finding the cause and treating it, maybe occurred to me at the time, if I recall it correctly! In any event, when

I said that, Uncle Sid looked at me with a smile and, when he died, only a few years later, I found that he had passed on to me a sizeable portion of his fortune!

I think it was the feeling of humanism and concern for people that was very deeply ingrained in both my father's and mother's side of the family; so, whatever I possess of that highly desirable trait I probably inherited from both my parents. But Uncle Sid's action was a good example of it. Thus, it always gave me pleasure to believe that what I have been doing is undoubtedly what Uncle Sid would have wanted me to do. So this is the way things sometimes happen in life. It puts emphasis where it belongs: On the importance of the family surroundings and the combination of that with your education, which may play major roles in molding people to a certain purpose in life. I believe it is terribly important for the family to realize this possibility and take full advantage of the opportunities presented.

Also, while I was at Yale (1928-1932) I ran across another marvelous professor who taught “Comparative Anatomy of Vertebrates.” He really stimulated further my interest in medical research and in research specific to anatomical structures and treatment of infections in laboratory animals. I did quite a bit of that under his tutelage. Again it showed the importance of the teaching environment in which the student finds himself (herself) as he (she) goes through the different levels of education. But the upshot of the whole thing was that when I finished at Yale, I decided that I should indeed proceed with my plan to go to medical school but not until I had had a little more training in Chemistry and Physics. And incidentally while I was at Yale, and in order to qualify to get into medical school, I had to study several of the basic biomedical science subjects, including organic chemistry, quantitative and qualitative chemical analysis, trigonometry, calculus and one or two others. I took several of these courses during sessions at the Columbia University summer school, so that it did not interfere with my ability to pursue a liberal arts curriculum at Yale during the regular academic years. As it turned out, that was the wisest decision that I could have made.

So much for that by way of explaining how and why I decided to study medicine!

Incidentally, one of those summer courses I took at Columbia (about 1930-31, I believe) was called “Food Analysis;” and came in very handy in connection with “Food Composition Tables” in Africa, where as it happened, ideas from the mentioned course gave me a “leg-up” on understanding why certain ingredients of supplementary infant foods, e.g., minerals, proteins and vitamins on that continent are so useful and important.

However, in view of the fact that I wanted to do research and felt that I needed to learn still more about chemistry and physics and related subjects, I also spent a year at McGill (1932-33) studying physical and colloid chemistry. And indeed, this has stood me in good stead. For instance, what I did between 1985-1994 required some knowledge of molecular and structural biology. Had I not received at least some introductory training in the subjects mentioned, I would have had a great deal more difficulty even in beginning to understand what these much more complex studies are all about.

I finished medical school at P&S [Columbia University's College of Physicians and Surgeons] in 1938 and, during the course of my training there, I had, on several occasions, especially, to think about possible research projects I might consider, once I became a physician.

A couple of things happened that at least were informed by the quality of the teaching and the exciting nature of the thinking that was going on in the Department of Medicine. I found out that the Professor of Medicine, Robert F. Loeb, wanted someone to help him catalogue the basic clinical and physical findings in patients who had suffered from glomerular nephritis— commonly called “Bright's disease” in those days. That got me started on research in hypertension and related diseases of the cardiovascular system, etc. After doing that work, one of Professor Loeb's colleagues in the Department, Associate Professor David Segal, asked me if I would be interested in taking part in the research program at the Columbia University Division for Chronic Diseases Research, on Welfare Island, in effect, a clinical clerkship there in the summer of 1936-37. I jumped at the opportunity and had an excellent exposure to the problems of working with patients

suffering from nephritis, hepatitis, cirrhosis of the liver, chronic pulmonary disease and the like. This constituted a major influence on my subsequent concern with the importance of the noncommunicable diseases in all settings, not just in this country but in developing countries as well. I have, in fact, followed up on a lot of that early research with what I'm thinking about now! That was another serendipitous occurrence based on the exciting connections that my professors established for me - strongly stimulating my interest in these very important subjects.

Two other important things happened while I was at P&S: I had the opportunity to decide what kind of papers I would write in public health and related subjects for the regular course in Public Health (mandated for all medical students, at that time); but I wasn't interested in reading the New York State Sanitary Code every week at 4 pm on Friday afternoons, which most of the other students also felt was mostly a waste of their time. The professor in charge, Haven Emerson, said, “Okay, why don't you think up something and I'll take a look at it and see if it is a useful idea.” I said, “You know we have a swimming pool in the Bard Hall dormitory which I don't think is well supervised from a bacteriologic point of view. What if I did a study on it?” He agreed; so I made a study of the Bard Hall swimming pool. After that, I came to the conclusion, concerning an entirely different substantive area, that lobar pneumonia might be a serious problem in nursing homes and other places with generally crowded conditions. And, if that were shown to be true, then the disease was surely communicable by personal contact. So I wrote a second paper entitled “The Communicability of Lobar Pneumonia” (Prince, J.S., “The Communicability of Lobar Pneumonia”, A term paper for junior year at P&S, 1937, unpublished, (unfortunately, copies are also no longer available in my library). College, Physician and Surgeons, Columbia University, New York, Unpublished, 1937. This paper not presently available except perhaps in the library of the mentioned institution) that people tell me was a land mark for those days. No one, I was told, had yet apparently written as thorough a review of the subject. That experience stimulated my interest in public health, and believe it or not, led me to predict that the most likely solution to the problem would be to develop a

pneumococcus bacterial cell poly-saccharide vaccine, as first suggested by Kendall as the only practical preventive intervention for lobar pneumonia caused by pneumococcal infections. That was about 50 years before it happened!

Following my medical internship at Sinai Hospital in Baltimore, I wanted to obtain a good background in pathology, clinical pathology and bacteriology, because, if I was going to do research, I certainly had to have a thorough knowledge of those subjects. Therefore, I spent a whole year (1938-1939) studying them, running laboratories in Governor Hospital in New York City, on the lower east side (East Broadway-Bowery area) where disease and injuries were rampant. In 1940-1941 I organized a pathology demonstration at Watt's Hospital in Durham, North Carolina and at the University of North Carolina Medical School in Chapel Hill, North Carolina. In the summer of 1940, I began my medical internship at Sinai Hospital in Baltimore. Sinai Hospital was a private hospital which was located across the street from and had very close ties with the Johns Hopkins University Hospital, both physically and staff-wise. We had consultations with them; they with us. It also further stimulated my interest in research and, consequently, when I finished my one year internship in January 1941, I decided to go back to Columbia to study biochemistry in the Medical School laboratory with some of the people I had known when I was a medical student there. I did that for about half the year and then an opportunity came to take up an assistant residency at the New York University Service of Goldwater Memorial Hospital for Chronic Diseases, again on Welfare Island. I was glad to have that opportunity because the people at NYU were well known authorities in the field of research on chronic diseases of the blood and renal systems. I began my work there in the spring of 1941.

Military Experience

By that time, the clouds of war had started closing in, however, and I decided that I should declare myself on behalf of my country (If young men around the country did not do likewise, I felt we were all going down the drain.) So I tried to enlist in the U.S. Army Medical Corps in the late fall of 1940. They said, “We can't take you because you are too

nearsighted. And you are also half color blind;" which was true. So I approached some highly placed officer friends in the Medical Corps to see if an exception could be made in view of the fact that the visual acuity defect had never interfered with any of my medical training or work. I also pointed out that I had 4 pairs of spectacles, and wearing them I had 20/20 vision and I had no intention of entering on active service with only one of the 4 pairs in my possession! But none of these interventions had any effect on the situation. So I kept on working at Goldwater until late 1941 and tried again to enlist after taking some eye exercises to strengthen eye muscles, etc.; but it didn't work.

However, by the time Pearl Harbor came along I had already discovered that I could get into the Canadian Army Medical Corps without any question ("if I could breathe"!). So, in March of 1942, I went to mDraft Board with a letter in my hand from the U.S. Procurement and Assignment Board telling me to stay where I was. I said to the Draft Board people (near P & S where I had signed up for the draft in 1938), "I wish to go to Canada to join the Royal Canadian Army Medical Corps. They said, "hang on a second." About two minutes later they came back with a mimeographed note which I still have. It says, in effect, that "Dr. J.S. Prince is authorized to proceed to Canada to join the Canadian Army Medical Corps; this pass is good for ten days." (Annex 2) They gave it to me and said, "here's a pass for ten days but don't come back." So, off I went, and on March 16, 1942, I became a very junior officer, a second lieutenant, in the Royal Canadian Army Medical Corps. Little did I know that I was going to be "in it" for four years and ending my tour of service with the rank of Major! But I was; and I "mustered out" March 8, 1946. In the interim, I had a lot of work during the first 18 months of my enlistment in Canada at training camps of all kinds from infantry to artillery and, of course, in "Military Medicine". The camps were located in Ontario some 60 miles from Toronto (Camp Borden) and, during the latter part of my training, in Nova Scotia (Debert, Tracadie and, finally, Windsor)

In the summer of 1943 (July 6), I could see they were getting ready to accede (finally!) to my request for an overseas posting. So I went down to Washington to visit my "gal" and her family and to try and talk her into marrying me. Her father, a vice admiral in the U.S.

Coast Guard, was clearly enthusiastic about this idea. So, with his approval, I did indeed persuade her to tie the knot and we, quite unceremoniously, were married, in Baltimore, because that was the only place where it could be done without a venereal disease blood test (no time because of the mandatory associated 10-day delay in receipt and processing of lab test results!) And, the same day, I took her up to Windsor, Nova Scotia, the location of my embarkation camp, arriving by train on July 8, and, after an obviously foreshortened and not very relaxed honeymoon, which ended ten days later, after an emotion-filled parade to the embarkation train, surrounded by large crowds of Windsor citizens (my wife had left for home the night before, as both of us felt the pain of separation under the circumstances would just be too much)! So I had time to see her off with many hugs and kisses and words of assurance the night before I left and was calling down the blessings of God to bring us together again when my work for continued freedom and resumption of peace among nations and people was done. We said “Amen”! But, little did I know of the extraordinary events which were to follow, possibly right up to the next millennium and beyond! Then, after a couple of days wait in the Port of Halifax due to heavy fog, the Lizzy (Queen Elizabeth I) sailed out of the harbor like the proverbial bat, and the rest of the trip was just as exciting not because of the obvious U-Boat threats, but because of the fantastic speed at which the ship traveled (even with zigzagging most of the way across the ocean, the trip between Halifax and Greenock, Scotland, was made in 96 hours flat, dock to dock)! I even had a chance to visit the commodious engine room and witness first hand, the huge steam turbines, generating about 180,000 horsepower, which propelled the ship at something like 35 knots and an unspecified amount more than that at flank speed, if and when necessary!

We arrived in Greenock in the late afternoon of July 20, 1943. And what a sight that was! For we had on board a Scottish-Canadian Regiment, the 48th Highlanders, together, of course, with their magnificent pipe band formed up, all the way forward on the Q.E. I's forepeak, in clear, full view, from all sides of the harbor entrance. And also, plain and wonderful to see, was what must have been virtually the entire population of Greenock

lined up in a deep “formation” of many lines of shouting, cheering and wildly waving men, women and children creating an uproar of welcome the likes of which I have never before or since heard and probably never will! That, combined with the setting sun to the Southwest, and the pipers' magnificent wailing rendition of “Bonny Prince Charley” left not one of us with dry eyes! For me, even our own American “Battle Hymn of the Republic” could not, under the circumstances, have been more emotionally charged! And you, dear reader, can perhaps understand, why it was that some 26 years later, I was able to “call up” in my memory the pipes and drums of “the 48th,” once again, to complete a perilous journey, by mule and on foot to a village health center site in a place called Molale, arguably in one of the most rugged and remote portions of the Ethiopian high plateau (Northern Mens -pronounced Muns-District of Shoa Province.) I know not by what alchemy the mere thought and imagined sound of the pipe band succeeded in straightening up my back, setting my failing arms and legs to scurrying and marching up the last quarter mile or so of the Molale market place, again in a late afternoon, and driving me onwards to a smart military salute, at the residence and office of the District Governor. But there I was, face to face with the person I had come to see, but with a military stance as much, I suppose, a surprise to him as to myself—Glory be!

Now back to Scotland and down to earth—we traveled by train from Greenock with two steam locomotives “double heading” our heavy troop train, and arrived in our camp at Aldershot the picturesque officer's quarters and mess of the 19th Century Royal Horse Guard Artillery Regiment about August 21, 1943. While there, and at a second, later bivouac on the beautiful Thursley Common in Surrey, a month or so later, we carried out a number of field exercises. But, although everything was completely blacked out at night, the German bombing raids had run their course, thanks to the brilliant defense of Britain by the Spitfire pilots and many others. The only bombing was from German “Buzzbombs” or V-1s. But the major action had moved elsewhere and by mid-October 1943, we were ordered to proceed to Liverpool, England to embark our ship for, of course, an unspecified destination. So, at the appointed time, all hands piled out of our barracks in the old Royal

Horse Guards' Officers' Quarters and onto the train, which then took us to Liverpool where we boarded a British Furness line passenger ship that, in peacetime, carried passengers on cruises between New York and points in the Caribbean, particularly Bermuda. She was appropriately called the “Monarch of Bermuda” and was part of about a ten-ship convoy which then proceeded, at about a 16 knot speed, to Algeria. However, because of the submarine menace in the Atlantic we went to Algeria the way you go to the proverbial “Bronx via the Battery, starting at 110th Street near Broadway!” However, a couple of us “old salts” in the Medical Reinforcement Group aboard “the Monarch”, got out our pocket compasses and wrist watches for “noon sights” and had a lot of fun figuring out where in blazes we were. Thus, putting our navigational findings together with our meteorologic observations, we figured that we finally arrived at Algiers some 2 # weeks later by traveling almost up to Iceland then almost all the way to Halifax and almost all the way down to the Azores, then to the area just West of Casablanca, Morocco and then through the Straits of Gibraltar into the Mediterranean Sea and straight to Algiers! Boy, oh, boy, what fun that “navigation exercise” was! And then, carrying out daily sanitary inspections on the ship, giving lectures on tropical diseases to the troops, and getting them started on their malaria prophylaxis (even though there was no appreciable malaria threat in Algiers). We had to get them used to the malaria eradication “drill,” so we were quite busy. Thus it was, that between our navigational high jinks and playing endless games of chess, and a minimum of 180 degree convoy turns dodging presumed submarines, plenty of good food and another really interesting engine room this time a turbo electric plant with an extremely complex control system (not at all suited to cost-effective operation and therefore not repeated after the war), the voyage proved a very pleasant interlude.

In addition, the lectures on tropical disease prevention and treatment, etc., were an interesting assignment to me as they gave me a chance to bone-up retrospectively on my training in tropical medicine at P&S where we had an absolutely top ranked course in the general subject, especially parasitology, which I had elected to take in my junior year. In summary I managed to keep myself agreeably, and I hope productively, occupied for the

entire journey. However, extensive experience in the tropical disease clinical area had to await my arrival in Italy, a few months after I left the U.K. [United Kingdom], that chilly day in October, which, to put a chronological fix on it, was a few months over 5 years after completion of my studies at P&S.

As indicated, we arrived in Algiers safely and without incident, even though we later found out that the convoy just preceding our's had been attacked by German dive bombers, and the Grace Line shi“Santa Elena” was hit by an aerial torpedo and sunk with all of the equipment from my future mobile laboratory, not to mention the 15th Canadian General Hospital aboard, except the vehicles! Of course I didn't know at that time that I was going to be running the mobile lab, or that this particular enemy action was going to cause me problems later on. In fact, I knew absolutely nothing about it until several months later when the results were plain enough to see! Fortunately, not a soul was injured much less lost, as the single torpedo sank the ship but slowly and she was actually under tow and almost made it into Oran. But, close to the point when it became too risky to try and make it, they dropped all the rope ladders and took off all the troops aboard and she promptly went “plunk” right down to the bottom!

After about 7 weeks encamped in tents at a place called Blida, about 40 miles southwest of Algiers, we broke camp and headed back to Algiers for embarking on another ship, this time a P&O (Peninsula & Orient) liner whose name I can no longer recall, but whose sanitation caused me plenty of problems since I was appointed the inspecting officer, as I was on the “Monarch of Bermuda,” and I had quite some run-ins with the housekeeping crew, even the Purser. In any case, it was only about a two or three day trip to Naples and, as far as I could tell, we had no severe communicable disease or food or water-borne disease problems aboard the ship either while aboard the ship or after leaving it. So, whatever the Purser did, was as good as could possibly have been done considering the facilities available to him!

Q: What kind of a unit were you with?

PRINCE: The unit in Algeria was called #2 Canadian Base Reinforcement Group. It included medical people, engineers, and representatives, both officers and other ranks, of several professional cadres. (By that time I had become a Captain and had completed the Medical Officers' training course at Camp Borden, as already indicated. So I was ready for anything or so I thought!) It wasn't long, however, before we arrived in Naples, in December 1943, and “trouble” raised its ugly head just before Christmas. Thus, I began getting a sore throat a few days after we arrived in Avellino our supposed “staging” Post prior to front line assignment. It is a good sized town in the Appenine Mountains where at the time in question, there was a large base camp, which only a few weeks before had been occupied by the Italian military, while they were still allied with the Germans - but, understandably, the camp was peacefully in our possession (although sans [French: without] “electricity!) by the time we got there.

Then, “fate” dealt me “another hand” just as I was getting ready for my much prized assignment as Regimental Medical Officer (RMO) to the Royal 22nd oQuebec, arguably the best fighting Regiment in the Canadian Army (The Royal 22nd (or “Les Vingt Deux”), a Canadian Army Infantry Regiment, as formed of Quebec volunteers with, it would appear, a burning determination to get even with the Germans for the extreme violence and casualties of Verdun, during World War I. They were all “crack shots” from their extensive experience in hunting in the Canadian north woods, and generally deemed the best and toughest regiment in the Canadian Army)! This was a most unwelcome turn of events; but there was no doubt in my mind about the severity of the sore throat, so, at my suggestion, my company Commanding Officer (CO) sent me to the nearest hospital - Number One Canadian Field Hospital - a fifty bed facility located in a small nearby town, Mercogliano. The doctor there took a throat culture, of course, and thought it was some kind of streptococcal infection, a “strep throat.” So he gave me sulfanilamide; but it made things worse. He came to me 48 hours later and said, “I have to admit that we made a mistake in the laboratory work. You don't have a strep throat; you have diphtheria!” I said,”boy, oh, boy,” I have been vaccinated twice for diphtheria and the last time was

just a little more than two years ago. (They had not reimmunized me at the time of my enlistment because the belief was, among medical circles at the time, that the reaction to the diphtheria toxoid in adults could be almost as serious as an attack of the disease.)

And, as it turned out, that belief was a big mistake, because we had some 1-2 hundred cases of very serious diphtheria among the troops there and fifteen to twenty soldiers died from it. I came pretty close to that end myself, because I had cardiac side effects due to the fact that the “bug,” a particularly virulent strain, had been sitting around in my body for some days, in effect, poisoning me with diphtheria toxin! So, as soon as the diagnosis was made, they administered diphtheria antitoxin which fortunately did what it was supposed to do viz neutralized the toxin from the diphtheria organisms (which, as indicated, had, however, already done some damage.) Thus, I was in bed for close to a month, with cardiac complications due to the fact that the diphtheria toxin acts preferentially on the conducting mechanisms in the heart, with various technically complex consequences which, in summary, even with the Grace of God, take a lot of time to heal!

As a result of the above, all of my assignments with the Canadian Army on the field were canceled; and I was told that I would have to stay back at the base HQ [headquarters], because I was in no shape to go to a front line Regimental Aid Post (RAP). The only unit in that HQ area that was of particular interest to me, was, as it turned out, a “Mobile Hygiene lab.” Of course, I was also interested in the hospital; but I am not a surgeon, and routine medical care wasn't, under the circumstances, what I thought would be the most useful assignment for an officer with my technical background. Then, lo and behold, the Commanding Officer from Division Headquarters (Medical) came down and said “Captain Prince I have a job for you. As soon as you can get out of bed and in reasonably decent shape again, I want you to go to work for Number One Canadian Mobile Hygiene Laboratory.” I, of course, jumped at the opportunity but I said, “You know I'm not a Public Health Laboratory man; I don't have any significant practice in that field; but I do have good knowledge of clinical laboratory work and pathology.” He said, “that's just the point; that's good enough for us. There isn't anybody else in this theater who comes anywhere

near your experience in laboratory services." So I took over Number One Canadian Mobile Hygiene Lab. That, believe it or not, is how I really got into public health practice!

I stayed in Italy about 12 or 14 months and then was transferred to Holland in late March of 1945, where I took command of Number Two Canadian Mobile Hygiene Lab (The lab had 3 vehicles on its roster including the mobile lab mounted in a 4x6 Bedford (British-built) truck, beautifully equipped medically as well as mechanically for the very wide range of lab work we were called on to perform. For further details, see my War Diary attached as Annex 3 a&b (2 volumes), which was attached to General Crerar's 1st Canadian Corps (part of "Monty's" 21st Army Group), as it moved up Holland and threw the Germans out of the Rhine Delta, including lower parts of the Maas and Waal Rivers, near Nijmegen. In the process, I got more and more familiar with the work of Mobile Hygiene Labs and, when I was returned to the UK and Canada, leaving my Lab, and all its equipment, at the Army Depot in Arnhem, on a cold, snowy, rather dismal and nostalgic day in Arnhem in the middle of December, 1945 when, in a way I hated to say "goodbye" to that faithful Bedford laboratory van after it had carried me and my exceedingly able and devoted team so many miles over so many Bailey Bridges and all the range of Maple Leaf Up (See Annex 3, Prince, J.S., "An Outline Plan for the Establishment of a Mobile Laboratory Service within an Official Public Health Agency"—unsolicited proposal to the U.S. Public Health Service, July 1946, unpublished.) and the other multitudinous byways we trod together. I had to bid "my" faithful laboratory a fond farewell! But I felt it was indeed time, especially since I believed I knew as much as anyone could about the work, such a laboratory could carry out, with relative advantage over fixed types of laboratory installations, in almost any situation requiring field epidemiologic/bacteriologic investigations in areas reachable by reasonable highway communications. (See Annex 3, Prince, J.S., "An Outline Plan for the Establishment of a Mobile Laboratory Service within an Official Public Health Agency"—unsolicited proposal to the U.S. Public Health Service, July 1946, unpublished.)

Q: What did the mobile hygiene lab do?

PRINCE: Briefly, the Lab that I commanded was responsible for providing all of the preventive and public health laboratory and sanitary services for much of the 1st Canadian Corps area of operations first, in Italy (#1 Lab) and then in Holland (#2 Lab) (Annex 3). It was a very, very busy period. We had everything from relapsing fever to pneumonia and typhoid, not only among the troops, but among the civilians as well. In addition, the best medical facilities were badly damaged during the war. So I did a lot of work for the civilian hospitals and even took care of a little boy with typhoid fever and helped the doctors save his life. It was a most rewarding experience and very educational for me, not purely for technical reasons. In fact, when I say “educational”, it was for me a lesson in humility.

In fact, it seemed to me that the Dutch had set an example of such bravery and fortitude in the face of unbelievably adverse circumstances, that they might well have considered themselves as paragons of heroism, which would be very hard for anyone to emulate, but, instead, poured out their affection for us, organizing fantastic “block parties” celebrating V-E day on May 8, 1945. We were privileged to witness this celebration from our billet in Lochem, Holland, where we were welcomed as “conquering heroes,” whereas as I have indicated, I felt it was the Dutch who were, by far, the greater heroes.

In connection with this general atmosphere of love and welcome proffered us, perhaps the most moving experience, I and my staff had while we were in Holland, occurred shortly after the young lad who had been cured of typhoid fever had gone home and was being nursed back to full health by his adoring family. The family, learning of the part which the laboratory had played in making this happy event possible, insisted that we come to their home and share dinner with them one night. Considering the shortage of food, amenities, and almost everything one needs for a “party”, at the time, and the fact that there were six hungry men to feed in addition to the family, must have been a daunting challenge for the lady of the household, with the effects of rationing and food shortages still clearly evident. Nevertheless, we were showered not only with affection, but with the most delicious fried eggs and beautiful French wine, no doubt hidden and hoarded for just such a celebration!

Setting aside the immediate reasons of VE day, it was made more delicious by the fact that we had enjoyed neither eggs nor wine much less such wine, for many a moon! Finally, the thought of the effort to which the family had obviously gone to make us feel so much a part of their lives, and the way the table was set, the gleaming china and crystal tumblers, the children smiling and holding our hands when Grace was said - dear God, how can I ever forget it? Of course, I can't and I have not done so for lo these past 50 years.

To revert for a moment to some further description of the events which led to my homecoming in the next few months: after turning in my lab and its equipment at the Arnhem depot, my orders called for me and my unit's complement to proceed immediately to Nijmegen, where this adventuresome tour of duty in Holland had all begun, to proceed without delay, by train and ship to Basingstoke, England. Well, that was most welcome news indeed; so we shook the snows of Holland from our boots as it were and after spending the night in Nijmegen were off, behind a steam locomotive (my very favorite mode of travel!) for Cherbourg and the Channel “ferry” (another favorite way to go, as far as I'm concerned). We then spent an uneventful few weeks in Surrey, from where we had headed off for North Africa some two years previously!

On the Channel steamer that day plowing into a fresh Nor'wester and standing on the forward deck, I had time to think a lot about everything that had happened since I had left home to go overseas, about two and a half years previously— much too much to write about in any detail here. Obviously, however, the pent-up desire to be with my wife again had not been satisfied by the exchange of letters. But it was an accepted, expected, and however unwelcome, fact of life, under the circumstances, and I did not then and do not now regret one moment of it. I saw my duty to my country and acted on it. That was that. However, I felt very badly, just as all of us did, about some of our brave medical officer colleagues who made the supreme sacrifice and would never see their beloved wives and families again, at least on this earth. I thanked the Almighty again, as I had many times previously, for granting me the inestimable privilege of continuing on in my efforts

to heal the sick and, above all, to prevent illness and sorrow, in any way my training and experience could justify.

So that's why I went into the Foreign Service instead of practicing my profession only in the U.S. You didn't ask me about that , but now, willy nilly you have the answer! I think it's a subject that is relevant to this exercise in terms of the kinds of motivation for the Department to look for in seeking out individuals who may be best suited perhaps to become Foreign Service Officers or, as in my case, Foreign Service Reserve Officers. (Always assuming that Congress will continue to consider FSROs as necessary for the proper functioning of appropriate components of the Foreign Service, especially, of this country's Foreign Aid Program!) Perhaps this latter parenthetical requirement cannot be considered a realistic basic assumption from the “log-frame” point of view and, instead, may be seen as an essential part of the “Project!” I don't know, but somebody's going to have to grapple with that question it seems to me. And the relevance of this question to the broader one, of the place of Foreign Aid in U.S. foreign policy, is indubitably linked to the answer. As a “primer”, in this connection, I think, we could do worse than recommend a reading of The Second Victory - The Marshall Plan and the Postwar Revival of Europe” by Robert Donovan, 1987) for all who may become, or are already involved, in dealing with “the Cold War,” its place in history, how and why we “won” it, and what might be its possible aftermath. The book calls a spade a spade in a fine unadulterated manner and, as a result, even though the events dealt with, go back 50 years or more, their treatment merits the closest attention, to this very day, in my opinion! Indeed, “he who forgets history is bound to re-live it,” as many knowledgeable people have said over the years, especially since WWI!

I must now say a word about the trip home and what happened when I got there. It was so much part and parcel of the great events I had been privileged to be a part of, and inescapably, of those which were to follow.

By the time I arrived in Surrey and “bedded down” in my quarters in the Officers' Barracks and Officers' Mess, it was Christmas week. I had the extremely good fortune to be able to contact some very good friends in the Midlands, Archie and Winnie Chapman and their families. I had had the good luck of being introduced to them through the help of the Knights of Columbus (KC) in London shortly after my arrival there in the Summer of 1943. So I was soon off to Bedford, (in the Midlands) again, but this time close to Christmas: and there was the local connection to Olney Park, one of those beautiful British country railroad stations. It was just like the classic Christmas card—"the prodigal son home for Christmas.” What a wonderful holiday— I have to admit it even ameliorated considerably my otherwise growing sense of homesickness. But, in due course, with many fond farewells, and thoughts on my part wondering if I would ever again see my now beloved friends, I was back in Surrey and we were all trying to guess when we would be sent packing for home. New Years came and went and no news. But the Lizzy (HMS Queen Elizabeth I), came in shortly after, and apparently went off immediately with another load, presumably for Canada. To make a long story short, on February 4, 1946, we finally got word to be ready to leave on the morning of February 6. Praise be! What excitement! At the appointed time, off we were for Southampton Docks and by early PM we were trooping back on board our good and trusted friend of 1943. But, oh my what a difference! Instead of 22,000 troops we were only a puny 6,000 and only 4 to a cabin instead of 16! And no “OC portholes” (to oversee closing of all the iron porthole covers half an hour before sunset each night and not to be opened until half an hour after sunrise.)

I went up forward again, as I have with every one of the 25 or so transatlantic crossings I've made by ship; my what a sight Southampton Water was! Blowing a half gale from the Southwest, the white caps growing and marching right at us and being tossed aside as some minor annoyance by our great ship as we proceeded outward-bound in the teeth of the gale. Then, far over the port bow, I saw a large grey ship with multiple stacks set to pass us, as always, portside to portside. We closed rapidly as the Lizzy kicked up her heels and then I saw her—the glorious and beloved four stacker, the Aquitania!-

presumably on one of her last voyages and maybe even now to be sent to her very last trip to the ship breakers at Rosyth! But suddenly, as from the walls of Jericho, came this glorious triumphant, breathtakingly beautiful chime whistle, chord upon chord, three times. And then, the roar of the gale, and our ship's huge steam horn, penetrating and adamant, usually to warn all “lesser beings:” “get out of my way.” But now, to salute the beloved Aquitania, perhaps for the last time!

And then there was just the growing gale, shrieking through the shrouds and driving the spray until it felt like pellets of ice - time to go below, take a hot shower with the crown of success resting on our shoulders (and mine was in truth a crown as I had been given a field promotion to the rank of major while in Holland) and to look forward without too much concern to the future. How wrong we were!

A new scene about 4 days later - we're headed for New York not Halifax; hurried arrangements made for me and a few others, to be allowed to disembark in New York and then, following after appropriate celebratory occasions, to go on to Toronto to take up my position at the Medical Clearance Facility until I could be “mustered out” later on; then back to NY by train for good! So, all arrangements made - I would be met at the pier. The Lower Harbor, the Statue of Liberty! The North River Piers! Pandemonium! Only a few people there, as most of the troops had to stay aboard and go on with the ship to Halifax; but not me! Just as I had “skipped” the border to join up in Toronto, here I was, “sneaking” in the back door, almost 4 years later. (January 10, 1946) Oh! those tugs! What a great sight; the dock creeps nearer and I can see a little knot of humanity gathered at the outboard end of the pier; and suddenly, there is Nona and all the family. What a feeling! Quick, off the boat into waiting arms love and tears all around, customs clearance, two minutes, off to the car on our way up the Westside highway, past the medical school my Alma Mater, the College of Physicians and Surgeons, up the Hudson River, the Cross County Parkway, Webster Avenue, New Rochelle and finally Hudson Park and Wildcliff Road, up the hill, a whole crowd of people, what's this? A block party! Again?! But this time the parade turns into our driveway and there, by the Grace of God, flies a really huge

banner which proclaims with a huge sign beneath the flag, WELCOME HOME BUD! And the American Flag flies proudly from our tall flagpole for all to see! I can't forget any of this either and never will to my dying day. Another reason why I joined the Foreign Service. “America, America. From sea to shining sea.”

Q: Before we leave the subject of your work with the Mobile Labs in Italy and Holland, was there anything else which you think might have some relevance to public health work in developing countries today?

PRINCE: After recalling and in effect “reliving” events such as those that I have just described, it is difficult to return to the technical aspects of what one has been doing. However, it is important to mention at least one aspect of the technical experiences we had in Holland which is still of importance. This has to do with the control of venereal diseases among the troops—a consistently major problem in all such military operations. So it seems strange to have to acknowledge that the measures we used fifty years ago are still important, with appropriate adaptations, in the control of one of the worst plagues that mankind has ever known—the Acquired Immune Deficiency Syndrome (AIDS). In fact, the whole approach to health education and promotion of “safe sex” in those days is hardly any different from the measures now being taken to try and diminish the threatening rapidity of spread of the mentioned epidemic, nor any less essential! Consequently, those of us who were responsible for implementing these projects with the military, in World War II, have considerable familiarity with the subject but realize that measures like those we took can by no means be considered sufficient to interrupt completely an epidemic of this type, even though it may have limiting effects, in societies where health education has a substantial degree of coverage and influence upon the general population, as in the U.S. In fact, though, there was relatively little, in my military experience in public health and preventive medicine, that would prove adaptable in the developing country milieu. The highly disciplined and structured military environment is too different to prove either appropriate or acceptable! Public health measures, by and large, cannot be forced on an unwilling and/or uninformed population. Instead, as Dr. Clelland Sargent, District State

Health Officer for the Syracuse District of New York, later told me, the “teachable moment” must first be attained. And then, only when the “public” we are trying to reach will be interested in listening.

In any event, when I was mustered out, on March 16, 1946, I decided that I was going to try to “sell” the idea of the use of mobile hygiene laboratories for civilian health activities in the U.S. Before I did that, I found out very quickly that I had to get a Master's degree in public health as no one would listen to what I was talking about if I didn't have the equivalent of “the old union card.” One of my physician friends and colleagues told me that I could earn a Master's degree with the help of the New York State Department of Health, if I went up to Albany and talked to them about it. So I did, in the early spring of 1946. They said, “Sure if you are willing to work for us for two years after you finish with your training, we will take you on right away.” I agreed to it, but before I did anything else, I wanted to have time to get to know my wife Eleanora (Nona). As I have already indicated, we were married on my embarkation leave in 1943 and I only had her close at hand for a few weeks, and then I didn't see her for two and a half years! So I had “a lot of ground to make up!”Public Health Education and Early Work Experience

Thus, in the Fall of 1946, I went up to Albany and started work for the New York State Department of Health as an “apprentice epidemiologist.” I served in Albany, Schenectady, and Syracuse and then, after nearly a year's apprenticeship, in the Fall of 1947, I became a candidate for the Master's Degree at Columbia University School of Public Health (CUSPH)—right back in one of my old Alma Maters again! And, while I was at the School of Public Health (the '47-'48 academic year), there were quite a few students from different Latin American (LA) countries in the class, since Columbia had a special interest in that part of the world. In addition, some of the professors were from LA and had connections with LA universities. So I came to know something about international health while I was at the CUSPH (over and above my limited experience in North Africa and in treating patients

with tropical illnesses like malaria, while in Italy), and that strengthened my interest in the field.

I graduated in June of 1948. Then it came time for me to serve my two years with the State Health Department. I was supposed to go to Syracuse, almost to the last minute, when they suddenly found they had to send me to Jamestown, New York, because the person who was supposed to go there didn't want to, also at the last minute. It happened that he was a classmate of mine but he had some feeling about going to a place that he felt was “too rural.” However, it was just my cup of tea, for I was tickled to get a chance to go to a relatively rural area like the Jamestown District. Also, if I had gone to Syracuse, I would have been Assistant District Health Officer; whereas, in Jamestown I was the “high muck-a-muck” - the District State Health Officer! So I went there and the two years became 10, in due course, because I found the work so interesting; and I also learned a great deal about how you draw conclusions concerning things that work, in medicine and public health, and things that don't!

You have to study these matters carefully - study a lot about the details, before you decide. For example, one of the issues that bothered me was that I had no way to satisfy myself about how to determine whether the work I was doing was having any beneficial effect on the health of the people of the area I was serving. Thus, while I was in Syracuse during my “apprenticeship,” and had tried, unsuccessfully to establish home and farm accident prevention programs in certain rural areas in the District, the District State Health Officer there who took me under his wing - Dr. Clelland Sargent, told me. “Bud, the trouble is the reason why these home and farm accident prevention programs don't work is because you have not reached “the teachable moment” with them—the time when people really begin to listen and you can get their attention. You have to create the teachable moment sometimes. But you haven't got it in this case, so bear that in mind wherever you are. Think about that and try to figure out how you would do it.” So when I got to Jamestown, I still had that message in my mind and I decided that before I could really determine “how to do it,” I would have to find out: number one, whether the

people understood what I was talking about, and number two, whether you could, in fact, determine the extent to which the program actually caused them to change their health attitudes and practices for the better, or was it something else, like improved economic conditions? These kinds of things, I later found, are commonly known as “confounding independent variables” - one might add, “confounding” in more ways than one! So that led me to the subject of my doctoral thesis which I had been thinking about “in embryo” as it were, all during my apprenticeship, and long before I knew if anyone would accept it! And these thoughts raised a whole bunch of questions in my mind.

So, the next thing that happened was that I became really interested in them. So I decided: “come on, Bud, the only way you are going to be able even to approach answering these questions is for you to learn something in detail, at least, about social science survey methodology and its possible relationship to epidemiology. You better start looking around for somebody with a broadly interdisciplinary public health program where you might be able to do a doctoral thesis of this type.” So I went to the APHA [American Public Health Association] meeting in San Francisco in 1951, among other things, to see if there was such an opportunity.

Another happenstance that then occurred, (as you note many, many things happened to me during my life that were perhaps, pure chance) was that Dr. Hugh Leavell, Professor and Head of Public Health Practice at the Harvard University School of Public Health, was at the mentioned conference. In fact, he was President of the Association that year. I “button holed him,” and said: “Professor Leavell, I've got a problem” and described these things to him. “Is there a place where I might go to get a good background in social science survey methodology, epidemiology and communications; these and related things that I need to know in order really to be able to set up some kind of a experimental way of finding out whether and how people can be influenced in their thinking about public health and improving their knowledge of the subject; and if and how you can measure this?” “The most important thing,” he said, “and the most difficult, is how you measure it and how you tell whether what you have been doing in health education or whatever, has had any effect

in influencing their thinking." He added, "You know this is very interesting because I just brought on an internationally experienced social scientist, by the name of Benjamin Paul, for my faculty, who is a specialist in cultural anthropology. He would be very interested in working with you on this." He concluded: "Send me a summary of what you have in mind and I will let you know quickly about its possibilities as a doctoral thesis subject."

To make a long story short, after some considerable discussion with my "boss," Herman Hilleboe, Commissioner of the New York State Department of Health and his staff, I was accepted as a candidate in 1951, shortly after the meeting with Dr. Leavell. (It is essential also to note that, since this would necessarily involve a leave of absence, albeit without pay, for a period of approximately one year, the Department would have to make arrangements for substitute service. Thus, a particularly strong justification was required. To my further good fortune however, Dr. Hilleboe had just brought a highly accomplished Social Scientist, Dr. Walter E. Boek, on to his staff. We met at length several times; he offered several excellent ideas for strengthening the research (see Section on Acknowledgments) and supported my plan with enthusiasm!) It was arranged that I would go to Harvard in 1952-53 academic year, do the academic work that would be needed to establish my qualifications for the research, get some idea of social science research and what it is all about, including, among other things, public administration. It would have to be a strongly interdisciplinary study. Professor Leavell said, "I don't know whether we can do it; nobody has done it before. We have never had, to my knowledge, a social science interdisciplinary doctoral student here. We'll see if we can "wangle" it; we may have difficulties with the university administration but we will see." So I went there with Nona and the little Tom (only 1 year old!) and settled in and went to work under Professor Hugh Leavell's tutelage. Having him as my degree chairman was a tremendous advantage, for he was a really remarkable, broad minded and extremely well-qualified interdisciplinary-oriented public health physician and, we all felt, a wonderful and inspiring teacher!

Well, Professor Leavell did "wangle" it and I got to take courses across the river on the Cambridge campus, at the Department of Social Relations (now the Department

of Sociology). Another remarkable professor by the name of Eleanor Maccobie was the person who was mainly responsible for laying out my social science research methodology training program. So I took courses with her and others in the Department of Social Relations, including social science survey research methodology, group dynamics, communications, sociology, etc., at the same time that I took courses in public administration at the Littauer Center, and in public health administration in the School of Public Health. It was a very, very busy year and I used all the Harvard libraries available, including the fantastic library at the Littauer School of Public Administration - now the John F. Kennedy School of the same subject.

From all these I got a tremendous amount of information that I have continued to use up to this very day. It says something about the importance of the kind of training which really suits people to take on work in the extremely complex environment of an international endeavor of whatever kind. But particularly if it is combined with the highly technical aspects of a “hard” science like molecular biology or bacteriology and medicine. (Some people would argue whether medicine is a “hard science.” I would be willing to admit some aspects of it obviously are not.) In any case, this combination of interdisciplinary courses was so difficult to get prepared for, I can see that one must think about it before you jump into it “with both feet!” But I was in a position to profit from the experience I had already had in Jamestown as a basis for the research on “Community Social Structure and Attitudes towards Public Health,” which was the title of my doctoral thesis. So that helped a lot; the thesis was completed in about five years and I received my doctoral degree in March of 1957.

All this time I was still employed as a full-time District State Health Officer in thJamestown District except that, while I was in residence at Harvard during the academic year 1952-53, as I have already indicated, there was nobody in my office in Jamestown actually filling my position full-time. It was handled from the Buffalo (Regional) and Albany H.Q. offices, and with numerous phone calls to me in Boston, and vice versa! Anyhow, once I returned to Jamestown (late May 1953) I had both the research and my job as the State District Health

Officer to look after! Trying to do both these things at the same time was really burning the candle at both ends. And in the middle of winter, when the snow was sometimes 2-3 feet deep and the thermometer well below zero, it could be quite a chore, even allowing for the fact that I had a 4-wheel drive jeep station wagon (one of the earliest models), with chains which I fitted (with considerable difficulty) to all 4 wheels, as conditions required!

My Life in Jamestown

I think it is necessary to spend a little time here and sketch briefly some of the features of what it's like to live on an “ex-farm” five miles from your office in the city of Jamestown, New York, in the “snowbelt,” south of Lake Erie and approximately 70 miles Southwest of Buffalo!

To begin with I should add that besides my job as District State Health Officer (DSHO) in the Jamestown District of the New York State Department of Health, I was, in those “Cold War” days, also appointed as the Chief Medical Officer for Civil Defense for the District. This, of course, required learning something about the technical medical aspects of atomic explosions and, in addition, participation and leadership in some of the preparatory/”preventive” measures - all of which was quite time consuming in the beginning - though less so, once the necessary plans and communications systems had been set up. Needless to say, the logistics expertise I had gained during my World War II service with the Royal Canadian Army Medical Corps was very useful, including, by the way, complete familiarity with jeeps - one of which I brought with me from New Rochelle and another which I had purchased in Jamestown (the jeep 4-wheel drive station wagon already mentioned - a really new idea in those days) both of which turned out to be essential items of equipment from all points of view, but especially in those really wild upstate New York snowbelt winters! Besides all that, I had a John Deere tractor, which I equipped with a snow plow in the winter and which was essential for my egress from and access to my house. The county and city road crews (including those which served the road I lived on) did not plow my driveway. But the roads were, of course, plowed,

sometimes even by rotary plows, like those normally seen only on railroads but, in this case, mounted on large and powerful 4-wheel drive trucks which you could hear coming a long way off and which were quite something to see as they made short work of 5-10 foot drifts (there was one Hamlet in the County, officially marked on the County highway map as “Little America” - its name entirely deserved!)

In spite of all these complications, and many others I can't go into appropriately in such a document, living on a farm (even though mostly an ex-farm) was quite delightful and very well suited to my job. This comment deserves some explanation because it is related to an aspect of my work as DSHO which was definitely instructive to my later overseas experience, as follows:

When I took up my job in June 1948, I was quietly informed by my Albany, New York, mentors that one of the most important objectives of my work in Jamestown and Chautauqua County, in which Jamestown was the largest city (population approximately 44,000), would be to promote the establishment of a full-time County Health Department. Such decentralization of health services was considered a matter of prime importance following upon the landmark piece by Dr. Haven Emerson entitled, “Local Health Units for the Nation,” written in 1945 for the Commonwealth Fund. (Local Health Units for the Nation, “A report by Haven Emerson M.D. Chairman, Subcommittee on Local Health Units, Committee on Administrative Practice, APHA. With collaboration of Martha Luginguhl, M.A., New York, The Commonwealth Fund, 1945) In Dr. Emerson's course, we were given a copy of this seminal document, and when I became involved in the MPH course work at Columbia and in Jamestown for the New York State Department of Health (NYSDH), I thought about its application to conceptualizing the basic “raison d'#tre” for full time local health departments. By 1953, when I returned to Jamestown from Harvard, with Dr. Leavell's teachings under my belt as well, I realized that what we were really driving at could be summarized by the term “decentralized/generalized health services” to indicate health services which would be available to people all over, not just in the cities, and that the services to be provided in this decentralized fashion would have to combine both

preventive and curative (generalized health services) for the target population. I tried the idea out on the late Dr. Herman E. Hilleboe, then Commissioner of Health for New York State and he felt it was sound. The nature of the concept, though not its definition, was also implied to a degree in the work of the Milbank Memorial Fund in New York, in the 1923 “health demonstration” in Cattaraugus County, New York - the first of its kind in the entire country. As a result of these mostly fortunate happenstances (for me), I came to the watershed in my career which eventually took me into international health!

Beginnings of Work in International Health

One day in the Fall of 1957, a letter came across my desk—a mimeographed copy of a notice sent out by the late Dr. Cliff Pease, the then Director of the Far East Office of Public Health of the International Cooperation Administration (ICA). He was looking for someone to serve as Deputy Division Chief in India in the Public Health Division of the ICA Mission in New Delhi. I answered the letter saying I would indeed be interested. I came to this conclusion, because I decided that I had finished the main part of my work in Chautauqua County. I had set about the work of convincing the people there that a County Health Department would be a beneficial change for the county. Consequently, I had had good experience in community participation, community development, community social structure, power groups and communications and the like.

So, I became interested now in doing something that I had had in mind for a long time, as a result of my experience in Algeria and Italy during the war, namely, to try and implement these sorts of things overseas. I got a very positive response from Cliff and I began reading up on India. But, by golly, by the time the spring of 1958 came around, he said “have you ever heard of Ethiopia?” I said: “Just about. I know it's in Africa and was partly overrun by Mussolini's military in 1935-1941. But I don't really know anything about the country.” He said: “I would like you to go there instead of India and be the Chief of the Public Health Division.” I said: “hold on Cliff I haven't had any experience; that's a risky thing don't you think.” He said: “No, your background and what you have been doing

is ok; don't worry about it." I said: "Okay, I am your man but I want to take time out this summer to go around to talk to people who have been to Ethiopia and as a result perhaps, get some indication as to whether my ideas might work there." Cliff told me about the Oklahoma State University (OSU) Ethiopia agricultural contract with ICA, headquartered in Stillwater, Oklahoma. I got in touch with the people in OSU and went out there and had a long talk with Dr. (Ph.D.) BilAbbott who was the administrator for the mentioned OSU contract. We had a fine chat in his office and I met several of his staff. It sounded most interesting to me right from then. I was also advised to visit with an individual in Buffalo, New York, Dr. Edward Jandy, ex-Director of the U.S. Information Service (USIS) program in Ethiopia, who had traveled widely in that country and knew it quite well. I talked with him and, and as a result, when I returned to Jamestown, I asked Cliff whether any one from the Mission would be in the U.S. during the next few weeks. He said that Dr. Brooks Ryder, the physician who was the ICA Director of the Public Health College in Gondar, Ethiopia would be in the country shortly.

Gondar was, of course, just a name to me as I hadn't heard anything at all about it. But Brooks gave me a marvelous filling-in on the work that was going on there and how significant it was; I agreed with him and told Cliff that Brooks was a good ambassador and that, "I really want to take this job now!"

The Introduction of Knowledge, Attitudes and Opinion Surveys

Q: Bud, would you continue with your discussion about why you went to Ethiopia and your views about AID at that time.

PRINCE: I agree that it is important to get an idea why people decide to seize the opportunity to work overseas, especially in these higher level technical positions. In my case it was Cliff's mimeographed notice, a kind of deus ex machina, because of the following reasons: number one, as I have mentioned in a previous part of this interview, I had decided to get my doctoral degree at Harvard under Dr. Hugh Leavell whom I met for

the first time at the APHA meeting in San Francisco in 1951. I finished my thesis, based on the research in Jamestown and was awarded the Doctor of Public Health degree in May 1957. So I had come to a point in my career, which was a logical one at which to begin thinking “what next? The answer is a bit convoluted but was to me at least about as follows:

One of the reasons for the research, which I had just completed, was to see if I could measure such things as attitudes, opinions and knowledge about public health on the part of a representative sample of a community population and then compare that with some other component of the same community population. In this case, I chose, in consultation with Dr. Walter E. Boek, and my mentors at Harvard, to compare the attitudes, opinions and knowledge of public health of a representative sample of the community and of the power structure of the same community. The decision, it is most important to add, was arrived at as a result of consultation with Dr. Boek, social scientist on the staff of NYSDH who to reiterate it, was also appointed as an ex-officio member of my Harvard University degree committee. His advice was of outstanding value in the permission for leave of absence from the NYSDH, the design of my research protocol, and in the implementation of the protocol.

So, the study concentrated on this particular differential factor (the representative sample vs the power structure) and I discovered that the most forward looking group in the community, from the point of view of attitudes, opinions, and knowledge of public health and public health administration in the Jamestown area, was composed of the women in the power structure! They were, far ahead of the representative sample, in understanding the importance of establishing a full time county health department which would subsume the jurisdiction of the eleven or so Town Health Officers and the two Public Health Officers for the cities of Dunkirk and Jamestown respectively and their small staffs. There was a lot more to the analysis of the survey, of course, and, for those who may be interested,

the results are summarized in an article I published in the Journal of the American Public Health Association in July 1958 entitled “A Public Philosophy in Public Health.”

In any event, the research stirred up my interest in being able to evaluate such things as knowledge, attitudes and opinions about public health in groups of people living in areas where projects are being instituted or about to be instituted and then, on a prospective basis to evaluate whether there has been some sort of change in the dependent variables of interest, over time - in other words the prospective evaluation of project impact. (AKA “outcomes”) And this type of question was being asked in public health administration circles more and more frequently as health officers had to justify the expenses involved in carrying out major public health improvements in communities within their jurisdiction.

Q: This is also before the idea of KAP (knowledge, attitudes and practices) came into being?

PRINCE: Oh, yes; some years ahead, as far as I know. But I hasten to add that I was encouraged to do this by Professor Leavell and the other members of my degree committee, especially, Professor Eleanor Maccobie, Drs. Walter Boek, and Ben Paul. With their encouragement, it is easy to see how I would have come to the conclusion that it was important - in fact, absolutely essential - to be able to measure the impact of health programs in NY state and, then, a few years later to realize the potential of this type of assessment as an indicator of success (or lack of it), in overseas development projects. So, when I finished the research and while I was still employed in Jamestown, I began thinking to myself that I should try doing something like that as well, perhaps in several additional counties in the State, since evaluation in only one of the many counties could hardly lead to a conclusion which would be generalizable for the rest of the State. (See also Mustard's comments ref. the subject of establishment of Full-time County Health Departments in the US and his reference to this New York work in many U.S. counties) (Winslow, C.E.A., “Health on the Farm and in the Village” The MacMillan Company 1931

(Refers to the famous Milbank Memorial Fund, 1923, Demonstration County Health Department Project in Cattaraugus County)

I went around and saw a lot of people, including Dr. John Grant at the Kellogg Foundation. You will recall that he was a most distinguished international public health figure; one of the earliest. He had done a lot of work in India and other places and written some excellent papers. I have a book summarizing his life and technical work which contains a number of ideas (See especially the telling comments to the effect that, “Any contact between a doctor or public health nurse and a patient that does not, on the one hand, increase the health worker's knowledge of cultural attitudes relevant to health and, on the other hand, increase the patient's understanding of health and its relation to different ways of thinking, feeling and behaving, is - to that extent - a waste of time on both sides. Thus, technical solutions to health problems should be humanized by an understanding of the existing cultures and subcultures and the ways these are changing,” page 178) which are very congenial to my way of thinking. (”Health Care for the Community-Selected Papers of Dr. John B. Grant,” ed. Conrad, The American Journal of Hygiene, Monograph series 21, The Johns Hopkins Press, 2nd printing, 1963) I, therefore, thought Dr. Grant might be interested in expanding the Chautauqua County research to several other counties in New York State. But no, he wasn't. Dr. Grant said Kellogg was not funding health programs at that time even though the 1929 Milbank Fund demonstration in Cattaraugus County had been a seminal prime mover in drawing attention to the usefulness of full time county health departments in the U.S. But Kellogg would not be interested in an impact evaluation, because the “baseline” in New York State was no longer a baseline. The State Health Department, District Health Officers, physicians in private practice and clinics, at the local level, including those operated by these physicians, had done such a good job, for example in immunizing infants and young children against the common communicable diseases, thereby diminishing the infant and childhood mortality rate, that the “baseline” was no longer a true baseline. Well, I said to myself, “I should go to some place where they have not had any public health services, see what I can do to establish a public health

program, and then study the conditions of the health of the people in those areas before the program is instituted and after it has been in effect for some period of time interval to be set during the design of the research). Later on, this type of study was dubbed a prospective study versus the retrospective approach where one examines changes in dependent variables over time where the “baseline” situation is reconstructed from retrospective data put together from answers to retrospective questions.

So when Cliff said he was interested in my working in Ethiopia, and after I had found out something about the country in the ways I have explained, I decided, wow!, this is the greatest opportunity, if I can just get the Mission to buy the idea of doing something like this. I can then see if my approach to solving the problem is correct and if I can get some meaningful results from the work. So this was the principal reason why I was so interested in accepting the assignment in Ethiopia! Of course, as previously noted, I should add that I had been interested in international health problems, especially since my work overseas in World War II; and the research at Harvard and Chautauqua County simply reinforced that interest. In addition, I was completely “converted” to the belief that we (the people) are not, as Santayana said, “an island” and similarly, I believed, that we have to be concerned about the health of people in other countries because everything is related to everything else. So that is the philosophical reason why I wanted to do this kind of work. But as well, there was the technical one in trying to see, if my ideas on evaluating impact of development programs were sound. So It wasn't long before I was on my way to Ethiopia. Fortunately I have my original assignment report (Annex 4) which was written shortly after I got to Ethiopia. It should provide at least a bird's-eye-view of health and related conditions, and already perceivable possible problems noted in the “Sanitary Survey”.

Q: Before describing that, did you discuss these ideas about evaluating impact with AID before you went out as something to be pursued?

PRINCE: Not with AID; but with Professor Boek and, of course, Professor Leavell.

Q: Cliff Pease did not know about it, about what you were trying to do?

PRINCE: I don't think I discussed it with him at all or, perhaps, only “en passant [French: in passing].”

Q: Did you have any sense of the receptivity of this idea in the Agency before you went out?

PRINCE: Following the several weeks orientation provided for personnel joining the ICA on overseas assignments, during those August days 1958, I think I discussed this research concept briefly with Griff Davis of AFR [Africa Bureaus Office of] Health Education and with the late Dr. Clayton Curtis, Chief of the Africa Bureau Public Health Division at the time. Both of them were interested, but especially Dr. Curtis who seemed quite excited about it. But I don't think I stirred up much interest in the proposal with anybody else in the group who took part in the course sessions in the Miatico Building; I didn't seem to “strike any sparks,” except with Dr. Curtis who had been involved in the Gondar program in Ethiopia from day one! He was very interested and supported the idea of the research from beginning to end!

Consequently, in spite of Dr. Curtis' enthusiasm, I realized that I was going to have to convince most decision-makers in AID/AFR that it was important to do this work even though it was going to cost a lot of money. Incidentally, one thing I did do that was very important was to find some people who would be interested in staffing something like this. You're going to have to have some technically qualified people, particularly a good social scientist. So I started browsing around in the Columbia University Widener Library and discovered a sociologist by the name of Simon Messing who had written his doctoral thesis on the “High Plateau Amharas” (a major Ethiopian tribe) in 1956. I got in touch with him at his home near New Haven, Connecticut and he jumped at the possibility of working with the team. He said, “That's just what you ought to be doing and I think I can help you with the design of that project.” I said well, “If everything works according to plan, you can

be sure that I will be getting in touch with you, because to find someone like you with real experience in Ethiopia, and with your knowledge of the language and sensitivity to the culture would be a huge asset to the project; so don't go away and do something that ties you up completely before I can get in touch with you!" That's how I recruited the sociologist member of the team.

I also looked at APHA [American Public Health Association] for people interested in doing the environmental health component of such an evaluation; I met a public health engineer, Frank Elder, who was working with APHA in New York but was also extremely interested in the research idea in Ethiopia when I described it to him. And what a lucky break that was for me, for the research, and eventually for Ethiopia's health services!

In addition, if I recall it correctly, I had been informed of an excellent and very experienced public health nurse, the late Elizabeth Hilborn, who had worked in Jordan for one of the predecessors of ICA, the Technical Cooperation Administration (TCA) but was presently in Ethiopia (Asmara) serving as Dean of the Itegue Menen Hospital Nursing School in that city. So I was able to contact her and she subsequently joined my ICA/Ethiopia Public Health Division staff as Chief Nursing AdvisoThis was, perhaps, our luckiest break of all, since she subsequently played a major part in helping with the design and implementation of the research project as well as with all the other technical aspects of the work of my Division at the USAID Mission in Addis Ababa.

Q: You must have had some idea then that you were going to be able..?

PRINCE: Yes, indeed! But I knew I needed a Research Project field Director and, as events transpired, the only thing I did not do, and that I couldn't do at first, was to find a public health physician who could fill that position. (I had made up my mind that I would need a Public Health physician for the job.) I discussed this idea with Dr. Curtis before leaving for Ethiopia, but he was, of course, very busy with other matters but continued his keen interest and support for the project, as it turned out later, as soon as the research

plan began to develop in my mind and I was able to write something down at the Mission, and send it back to him in Washington. He then used that information and, through collaboration at Harvard University, found a recent HSPH [Howard School of Public Health] graduate, Dr. Dirk Spruyt, to accept the assignment. It's clear in retrospect that a great deal of credit should be given to the late Dr. Curtis for his farsightedness and his recognition of the significance of this kind of work and for his enthusiastic support and assistance from start to finish. It grieves me greatly that, although he did live to see the work to completion and publication, he died just as I was about to leave Washington for Ghana (in August 1973) where I participated in the equally exciting Danfa Project, the planning for which, as far as my part of it was concerned, originated with my experience in New York State, Harvard, and Ethiopia!

Q: He (Clayton Curtis) was Chief of the Public Health Division in the Africa Bureau?

PRINCE: Yes, before I went there. When he returned to Washington (in the spring of 1958, I think it was), he headed up the Africa Bureau Public Health Division, as you say, (we had technical offices with strong field connections and responsibilities located in AID/Washington in those days.) And, of course, Dr. Curtis was biased in a positive way in favor of health work in Ethiopia because he had been there for so long (5-6 years) and had been responsible for so very much of the ground work that led to the founding of the Gondar Public Health College and Training Center, and he was also most positive about its long term potential as a development initiative in that country. (In those days neither the IBRD [International Bank for Reconstruction and Development] nor any other official Government agencies or their staffs, had accepted the notion that reasonably decent health conditions were at least necessary (albeit as everyone agreed) not sufficient, for concurrent economic development, in any developing country. My discussions of this pressing subject even, on a few occasions, at Ambassadorial level, only elicited the prevailing view, at the time, that development would more or less follow improved economic parameter of development and that health was not even a “necessary” parameter in this respect. The IBRD's more or less complete acceptance, in the 1993

World Bank Annual Development Report of the view that health is a necessary component of any Country Development Program is self-explanatory! See following page for more on this subject (especially second and third paragraphs).

I have always looked upon this latter opinion as a kind of “heritage bequeathed” to me by Dr. Curtis. During that last conversation together he gave further strength to the opinion I had already developed. It may, therefore, be of some interest to explain how it was that I came to this conclusion, relating health and development initiatives in the whole process of international technical cooperation.

But one other set of circumstances also exerted a major influence on my thinking about this general topic of health and development in third world countries. As I may have mentioned, my sister Ruth Mack, a very experienced economist serving as a senior consultant with the Institute of Public Administration (IPA) in New York City and I had engaged in quite a few chats about this subject because she had questions in her mind about whether what we were trying to do to improve health in developing countries would constitute a contribution or a detriment to economic development. Detriment only because of the fact that increased population would certainly follow projected lower death rates, resulting from whatever preventive medicine and public health programs we could establish in these third world countries. On the other hand, if successful, such programs would differentially reduce mortality and morbidity from the traditional communicable diseases that effect tropical countries in such a disastrous fashion. Consequently, the quality of life experienced by people living in those countries, particularly in the rural areas thereof, could be much improved by this intervention. In fact, if this also resulted in a lower total fertility rate, then the consequent increase in population might be considerably less than anticipated, or even reversed, by increased contraceptive prevalence.

Ruth had a friend by the name of Dr. Nancy Baster, Ph.D., who was working with the University of Sussex in England and also with a U.N. organization known as the United Nations Institute for Research in Social Development (UNRISD). She also told me about

Selma Mushkin, also a Ph.D. in economics, whom Ruth thought had written some articles strongly supporting the notion that health programs had a definitely beneficial effect on development in the third world countries. So she arranged for me to meet both of these kind ladies as they happened to be in New York at the time. In the case of the visit with Dr. Baster, it was fairly short, and we merely exchanged views and looked forward to meeting one another when she visited the Economic Commission for Africa (ECA) in the next year or so, in the hopes that we could get together then and that she could help me in my work with the population program which the ECA was undertaking and for which they had established both a demographic statistics and a specific population office in their Addis Ababa headquarters.

Dr. Mushkin told me of the work she had published in “Public Health Reports” dealing with the very subject that I'd been discussing with Ruth. I was extremely interested in pursuing this matter because of all the problems I'd had in getting anybody at the AID orientation session to discuss it in any detail. Unfortunately, I have misplaced the reference to the work done by Dr. Mushkin and I believe also co-authored by Dr. Frank Collings, Ph.D. Suffice to say, I was very encouraged by the findings which both Doctors Mushkin and Collings apparently uncovered giving considerable strength to the notion that health and economic development are in fact closely related, with both being critical components of the improved quality of life that's also necessary for economic development, even though, of course, neither can be considered sufficient for economic growth. Obviously, there is a lot more to this question than just health inputs, but now the latter are at least considered an important component of what is required.

Well, this information was excellent ammunition for the later battles I had with people all over the place, including even ambassadors from time to time, and has since been given great support by none other than the IBRD in their famous 1993 World Development Report. (The World Bank: World Development Report, 1993 - Investing in Health - Oxford University Press, New York, June 1993. See Chapter 1 in its entirety, but especially pps 18-20, and the 2 “Boxes” (1.1 on pg. 19 and 1.2 on pg. 20). Giving credit where credit is

due, one has to admit that the Bank has had at least two Health Sector Policy Papers, one in 1975 and the other in 1980, the latter being a much more proactive with respect to the possible relationship between health and development but still not fully committed on the subject. But, of course, the 1993 report does it all! Also, one should never neglect the work which Jack Bryant has described in his world-renowned book, “Health and the Developing World.” In fact, Dr. Bryant has devoted an entire chapter to this subject entitled, “Health, National Development, and Managerial Methods” and a subtitle section entitled, “The Interaction of Health and National Development;” pages 96-97. So, I think, by and large, it's a “done deal” in so far as recognition of the fact that health is essential but not sufficient to development - the concept that I'm perfectly willing to accept.

However, working out the detailed sector policy that donor nations or agencies need to establish with their host countries is another matter. I am sure there is a great deal to be said on this subject - way beyond what has already been said. It's an enormously complex subject affecting basically every country in the world, in my opinion, and will take a long time to sort out, especially in the presence of the extraordinary degrees of instability and political “churning” that seem to be characteristic of today's international events. The best we can do is to keep thinking about the importance of the issue in all of the development activities in which we participate whether it be central government or most peripheral, village level aspects of development-the latter too often neglected!

USAID Policy on Health Programs

Q: Do you have an impression of what the AID health policy or strategy was at that time?

PRINCE: I'm not even sure there was any mention of health policy and strategy in the AID/Washington [AID/W] orientation session which all of us new FSROs participated in. In fact, one of the perceived problems with the orientation, on my part at least, was that it was too “cut and dried;” there wasn't much give and take in the group. So, I wasn't fully satisfied with the orientation, and I think this view was shared by a number of other participants.

Q: You didn't have much sense of the importance of public health in the ICA at that time?

PRINCE: Clayton and his boss, Dr. Gene Campbell, Director of the ICA Office of Health in Washington, certainly gave me the impression that health should be a very important component in development initiatives. But you have to realize that at that time there were only two important health programs in Africa south of the Sahara: one in Ethiopia and one in Liberia. It was “slim pickings,” and this apparent lack of emphasis on HPN [health, population, and nutrition] programs was a constant problem back then. Thus, concerning “health and development” and Dr. Bryant's seminal book on the subject, I have always agreed with him that, indeed, health was a necessary component of the development process, even though, with the exceptions noted, I have had to fight my way pretty much from one end to the other in getting people really dedicated, not just interested, but dedicated to the idea that this was the case! And it is only now that the World Bank officially recognized this fact in their Development Report for 1993. They have come out and said, “Yes we've got to put money into this... up to 40 percent of our money will be going into health, population, nutrition-related projects, because we realize that this is an essential aspect of development.” (Emphasis added) Boy, oh boy! Meanwhile I felt I was “shouting in the wilderness” all those previous years!

Q: You are referring to the World Development Report for 1993.

PRINCE: Yes. I think very few people outside of our circles realize the battles that some of us in public health have been waging to get that point across. Strangely, some might say, since nothing should have been more convincing to any perceptive health officer practicing in jurisdictions with large rural, relatively low income components, than that the levels of health and illness in these communities were closely and inextricably related to their retention of young, vibrant families, increases in productivity, and overall development. My experience in Chautauqua County constituted no exception to this rule, for the County was underdeveloped from many points of view, and parts of the rural portions were, believe it or not, almost as remote and difficult to reach as parts of Ethiopia. (See Annex

5, and publication, “Public Health Practice in New York State and Ethiopia-A Comparative Analysis”, New York State Health News, March 1963.) Poverty existed in those areas just as it did anywhere else in the world! In fact, nobody could have told me, after my ten years in Chautauqua County, that health wasn't an important component of development. I couldn't understand why this idea wasn't well accepted - not accepted at all, particularly among many economists at the time.

Q: Your impression was that among most economists, health was considered not to be a contributor to economic growth and therefore should not be given a priority?

PRINCE: I was certain that was the general view (excepting the views putatively expressed by Mushkin and Collings as noted above). Yes, and by the way this view is supported by the lengthy conversations on economics and development I continue to have with my sister, Ruth Mack Ph.D. (Even today, although well along in years, she is still very active.) A book she wrote in 1971, Planning on Uncertainty: Decision Making in Business and Government Administration,” (Mack R.P.) is currently considered a landmark in the general substantive area of long range economic planning. So, when she, and now the World Bank, basically support my views on the matter, at least in principle, I feel vindicated for having consistently objected to the contrary view held so widely by so many other workers in the general field of third-world-country development economics.

Q: What year was that?

PRINCE: That was 1971. She was active and got her Ph.D. from Columbia University ca.1931; and during the early days of our discussions on this question of health and economic development she was also hard to convince about the significance of the relationship. In fact, we used to argue about the matter from time to time. No longer! For, in the intervening years I must allow her accolades, not only for the mentioned publication, but for her own “advancive behavior” (a term she uses in her book) in addressing the development problems, now set forth in the mentioned World Bank publication and the

many others on the same general subject. This began I guess with her interest in the work of the UN Research Institute for Social Development (UNRISD), in the early sixties, which also dealt with the question of the relationship of the quality of life and “development,” and the work of the University of Sussex, Institute of Development Studies.(See also especially Nancy Baster's seminal collection of work carried out by the Institute and published in the April 1972 Journal of Development Studies and (”Measuring Development,” The Role and Adequacy of Development Indicators, Baster, Nancy, ed. See especially Chapter entitled, “ Social Indicators and Welfare Measurement: Remarks on Methodology” by Jan Drewnowski pps 77-90, Frank Cass, London, 1972) in April 1972), particularly, the work by Drewnowski explaining how it came to be that “economic variables such as GNP - were increasingly used to “measure social progress”)

Q: What was her line, her view?

PRINCE: My sister's view at the time was the same as that of other economists: The big engine of development was the economy, the economic aspects of development. “You will find it difficult to make a case, Bud, that health by itself has much to do with development. Because if you don't have the economic component of development, for example, improved GNP and per capita GDP, you're not going to get much improvement in the development of the country just from having a health program.”

And later on, in a meeting in Cairo of the Public Health Division Chiefs from the Middle East, Africa and Europe missions in 1969, I met the US Ambassador to Egypt; and he sounded like a “broken record” - the same thing; just as I said. It was a big, big, problem in those days; you remember that? It was very difficult to convince people that we public health advocates knew what we were talking about. The idea of spending so much money on health programs, and especially on the “esoteric” operational research that I was proposing, was really a big divergence from the norm. If there had been a basic policy and strategy, it would, I am sure, not have included these types of activities. Consequently, it required a lot of conviction on my part and that of people like Dr. Curtis, Dr. Leona

Baumgartner, and no doubt many other public health oriented people in AID/W, that it was important for this research to be approved and funded. We had to fight right down to the finish, (and I'll explain more about that later.).

As a result of all these considerations, and Brooks Ryder's description to me of the value of the Gondar approach as bringing practical reality to the health problems of the underdeveloped countries in Africa, I was convinced that that was the thing to do!

Q: Do you want to describe now what that approach was? Or pick it up later? So people will understand what you mean by the Gondar approach?

PRINCE: It would be good for me to say a bit, at first, about how I picked up some ideas from the literature. I mentioned Benjamin Paul; he was probably not so well known as a sociologist in those days as he is now. But, when I was working on my doctoral degree at Harvard, he was, as I have already indicated, a distinguished member of the faculty there. He was the first sociologist, as far as I can recall, to have that position in the School of Public Health. Professor Leavell was a major reason for his being there. For Hugh (Leavell) was absolutely convinced of the validity of the decentralized, generalized, and interdisciplinary approach to community health services, see his article “Contribution of the Social Sciences to the Solution of Health Problems,” New England Journal of Medicine, December 4, 1952. But he had the same trouble getting other people to believe him, especially from the point of view of the interdisciplinary part of it. One of the most interesting and beneficial aspects of this situation, at least as it seemed to me, was that Professor Paul had begun writing when he went to Harvard and then finished his seminal book, Health, Culture and Community, 1955) while we were there (and I say “we” because there were three or four members of the class of '53 who were also extremely interested and involved in international health work). This group included, besides myself, Carl Taylor, who is now Emeritus Professor at Johns Hopkins (he went to Hopkins after Harvard and prior to the famous study at Narrangwal, Child and Maternal Health Services in Rural India: The Narrangwal Experiment-A World Bank Research

Publication, December, 1983), Professor-Emeriti John Wyon and Brian MacMahon, who subsequently became professors at the Harvard University School of Public Health; (we were all together in the class except Carl, who already had his doctoral.) I believe thaBen asked us to edit this manuscript which, in those days, had not been given a name. We talked with him about it and all agreed that it might appropriately be called Health, Culture and Community.

The book received wide circulation and, from its frequent citation in the literature, must have attracted great popularity among cultural anthropologists and in virtually all health development circles and teaching institutions. That was one of the things that helped convince me that the approach, of very strong involvement, intimate involvement, of communities, community leaders, the power structure, in any kind of development activity was absolutely essential! See also my own publication on this subject, The Health Officer and Community Power Groups, Health Education Monograph #2, University of California/ San Francisco, Berkeley 1956, which I'll be referring to in more detail. This was true overseas at least as much as it was in the United States, and with respect to my experience in Chautauqua County, New York!

While finishing up my research, I had a call from Professor Bill Griffiths at the University of California, Berkeley, asking me if I would be interested in writing a paper summarizing my findings, especially with respect to the importance of the power structure, in a community approach to selling health programs, and in implementing them as well, of course. In what was a weak moment (because I was absolutely up to my ears with work, between my regular job and finishing up preparation for the defense of my thesis and getting ready to go to Boston a few more times to tidy up final details at Harvard, etc. - all prior to leaving for Ethiopia in the late summer-early fall!) I took up the challenge, and much to my pleasure, the paper was published, prior to my leaving for Ethiopia. As far as I can recall, however, this paper was not greeted with very much excitement - positive or negative; at least I never got much reaction to it of any kind. However, it served to solidify my own thinking; and the important part about this whole discussion is that it was one

of those major capstones of my experience, in terms of the development of the project for evaluating health program impact on community health, that I finally came up with in Ethiopia! One of the many reasons why this experience was so important was that it convinced me of the need to have a social scientist on such a research team. In fact, how could it have possibly been done successfully without the help of Simon Messing's “savoir-faire [French: knowing how to act]” and entr#e to Ethiopian groups and their leaders?!

I also summarized my thesis findings for use when I was discussing the possibilities of doing some kind of follow-on study in New York State. I have a copy of my thesis summary here, but I'll just mention the main conclusions, as follows:

“The main body of my Thesis research was concerned with the relationships which could be discerned between the ecologic and social characteristics of Commville (that's the name I gave to the city of Jamestown for the purposes of anonymity as is customary in all such studies) and the knowledge and attitudes of its citizens, with respect to public health activities both in the city and the surrounding county. The parameters to be studied included, attitudes towards and knowledge of, the existing official administration of public health in the city and in the county, and several alternative methods by which this administration could be made more effective. “With these terms of reference,” I added, the thesis study design placed particular emphasis on a comparison between the knowledge and attitudes of the main “power groups” of Commville and of the general population.

The main conclusions from the analysis of the data obtained at the time were that, taking all the findings into consideration, it would seem, first of all, that the people of Commville could, indeed, be persuaded to increase their public health services and facilities and to bring them more into line with the newer concepts of public health, (meaning establishment of county health departments - decentralized, generalized health services and the like) than they were at the time of the study. It would appear that the people of Commville would also support the establishment of a County Health Department in “Lake County” (an “alias” for Chautauqua County) provided that this was presented to

them in the proper way. However, in order more adequately to assess the possibilities in this connection, I suggested that it would be most desirable to carry out a study like the present one among the people of Lake County, outside of the city of Commville." Secondly, it seems to the writer (and this is the paragraph I want to emphasize) "that if our health educational activities and health services are to be properly evaluated, some way must be found by which to determine the effects of the activities and services on the attitudes, opinions, and value systems in general of the people in the community. Hopefully, the present effort by showing how a suitable baseline of knowledge and attitudes towards public health can be established, may serve as a stimulus for the carrying out of additional investigations. The creation of "experimental areas" including adequate "control communities" representative of NY State as a whole might be a first step in this direction."

That was written in 1956 and the last two sentences summarize what I had in mind for a wider study involving communities in NY State other than Chautauqua County, and covering a much wider geographic area. I think my teachers taught me well!

And all this is part of the background for my particular interest in going to Ethiopia. In addition, it is important to note that there was further impetus for my interest, in development of local health services overseas, which I derived from an article written by the same public health practitioner, Dr. Haven Emerson, who taught us Public Health 101 in the medical curriculum at the College of Physicians and Surgeons at Columbia University in the 1930s, entitled "Local Health Units for the Nation." The paper was requested by the American Medical Association and was published with the assistance of the Commonwealth Fund of New York with the fullest substantive concurrence of the American Public Health Association, of which Dr. Emerson was a past president and most respected "docent."

In this study, Dr. Emerson holds that the key to the successful delivery of health services, for the entire population of any state in the U.S., is decentralization of authority

and responsibility for the delivery of these health services to the appropriate local governmental units. He describes such local government structures in New York and in many other states and then deals specifically with those in New York State. He says that, “superimposed on this local structure and having its authority in a 1913 law, and a 1923 amendment empowering the State Health Commissioner to divide the State into 20 or more Sanitary Districts, is the state system of health administration, operated, staffed, and financed directly by the State Health Department itself.” He describes how the Districts were staffed and the approximate number of counties included in a Sanitary District, etc. “The state and local staff,” he said, “would function together as a single team and, thus, provide adequate local health service coverage in each of the Districts.” Thus, the prophecy of the American Medical Associatio(AMA) Special Health Commission of 1930, responsible for the Emerson paper, is rapidly being fulfilled and in such a manner as “to be sure that the State District system does not destroy, and in fact does much to encourage, local responsibility.” And after the first few years in Ethiopia, I thought to myself, “Amazing! Dr. Emerson, some 30 years ago, had an idea that may be applicable in any country and any state, not just New York State and not just the U.S.!”

And guess what we did in Ethiopia? I'll come to that later but you won't believe me about what happened. I don't know whether this story has been written down anywhere before. But generally speaking, I doubt that many health workers have any idea how significant the work that was done in this country was, in the development of an approach to recommended health policies and strategies in much of Africa. But the truth of the matter is that none of these ideas were particularly prevalent in Africa and, in fact, were mostly nonexistent in those days, in the very beginning of 1952, when the Gondar project got underway. But there was concern about the situation and consequently it became a “fertile field” in which to suggest innovative concepts of public health practice. Little did I know, even then, how relevant that was and how important it would be to try to sow these seeds of progress! But that is what I set out to do in 1958; I don't know whether I succeeded or not, but I'm sure I had some impact on the whole situation. In other words,

the situation fitted perfectly my mentor, Dr. Clelland Sargent's postulation about the arrival of the “teachable moment.” We had to help create this moment among the rising cadres of public health professionals and through them, among government officials at all levels, in the various countries with which we worked.

Of course, nothing could have been done without the fullest cooperation of all of my colleagues in the USAID, like Gene Campbell and Clayton Curtis; the responsible Ethiopian Government officials and the entire highly proactive staff of the Ministry of Health such as, in addition to the Minister himself, His Excellency Ato Yohannes Tseghe, Vice Minister in the Ministry of Health; and the many other professionals in the Ministry, such as Hailu Sebsebbe, Director General for Health Education, Wo. Sambatu, the chief nursing officer, and so many other really sharp and yet equally pleasant working partners! And all of my staff in Ethiopia and elsewhere, relevant ICA/AID, U.S. Embassy and other bilateral governmental agency staffs working in Ethiopia, as well as the cooperating international and private voluntary organizations and our host country colleagues throughout the country must be included. They were all involved in a major way, believe me! I cannot emphasize that fact sufficiently! And that also made the effort for me even more rewarding and exciting than it would otherwise have been.

Assignment in Ethiopia

Q: Do you want to say a little bit about the Gondar approach?

PRINCE: Yes, I'd like to discuss the whole business. Let me say something else: I had made up my mind, after talking to Brooks Ryder and finding out how much WHO [World Health Organization], UNICEF [United Nations Children's Fund], and even other U.S. bilateral programs were involved in the Gondar concept, that it was essential for me to establish proper contacts and good relationships with as many of these organizations as possible before I went to Ethiopia. The obvious way to do that was to meet some of their officials in the appropriate places on the way there!

But something else happened that I need to mention now which relates to the whole thing as well. What happened was that pretty close to the time that I spoke to Cliff Pease about my interest in accepting the assignment in Ethiopia, he got a cable, which he immediately passed on to me by telephone, saying that the Ministry of Health had qualms about accepting anybody for the position proposed without more detail about the nominee's background. And the Mission was reluctant to violate the general principle of nominating people and having them accepted with a very brief statement about the vitae of the supposed professional, because the Mission felt that the U.S. Government didn't want its nominations questioned on technical grounds. I called Cliff and said, “Look, you know I'm a doctor; I know how doctors feel about such matters... How would you feel if you were a member of the County Medical Society and somebody was put in, with a very minimal description of his background, as the head of the Board of Censors? (The top governing committee of practically all city and county medical societies throughout the country) Holy mackerel, that would be totally unacceptable.” So I did not blame the Minister of Health for taking exception to the idea of someone outside the Ministry passing on the credentials of a candidate for such a demanding position. He realized how important this could be for the development of Ethiopia's health program, knowing the relationship of the U.S. contribution to Gondar and all of the “Joint Fund” arrangements in effect at the time, you know, where the TCA health officer signed the checks for the Cooperative Health Service Program with the Minister! One could easily imagine if one were in the Minister's position how one might react to someone you didn't know taking on that function. So Cliff said, in effect: “Well, maybe you're right; why don't you handle it as best you can.”

So I wrote a letter to the Ethiopia Mission Director, through channels, with a copy to Bob Shannon, Administrative Assistant in the TCA health office, and I said in substance, “Dear Mr. Klein, please be assured that I have heard about the problem and I agree with the Minister completely. Please send him a copy of my curriculum vitae (enclosed) and add that I would, of course, be absolutely committed to abiding completely by his decision on whether I am qualified for the job.” It couldn't have been more than ten days from the time

I sent that response when I received an urgent Mission cable via Washington saying, in effect, “the Ministry of Health wants you as soon as possible. We don't want you to spend too long getting here.”

Q: You bypassed the AID HQ in the process?

PRINCE: Not really. They had copies of everything, and Cliff, of course, had some correspondence with the Mission in Ethiopia as well as some cable communications. Thus, in this case at least, it was an accepted approach. The result was that I was on my way with the proper introduction to the Ministry, in writing.

I decided that I would stop in Geneva first to see the relevant WHO officials and then go to Alexandria, Egypt to meet the staff in the WHO Eastern Mediterranean Regional Office (EMRO), which was responsible for the Ethiopia component of the WHO program in those days. And then I decided it would be important for me to stop in Sudan (Khartoum) to meet the Dean of the then Kitchener Medical College because Brooks Ryder had suggested trying to lay the ground work for the training of Ethiopian physicians in countries and medical schools closer to Ethiopia geographically speaking than the U.S., and more in keeping with the environment the physicians would be working in when they returned to Ethiopia. So I set my plans accordingly, once approved by the necessary ICA officers, and we took off “en famille [French: with the family]” on a PanAm flight in late October 1958; I can't remember the exact date. But it sure was the beginning of the longest and most exciting adventure of my entire life, even allowing for the not exactly boring four years experience with the Canadians in World War II, or the 10 years stint in upstate New York!

Before leaving, and while my family and I were still at our house in New Rochelle, New York, waiting to take off for Ethiopia, I felt it appropriate “protocol” to phone the office of the Imperial Ethiopian Government (IEG) representative to the United Nations Organization Headquarters in New York City. Her name was Woizero (Wo.) Jodit Imru, a high official in the IEG Department of Foreign Affairs and a member of the Royal Family. I explained

that I would soon be on my way to take up my assignment as ICA Mission public health division chief and asked her if she would be willing to see me for a few moments before I left for Ethiopia. (Of course I explained in very brief and general terms the reason for my departing for Ethiopia.) This inquiry elicited a speedy and affirmative answer, so, “best bib and tucker,” complete with Homburg (but no striped trousers), I was granted immediate entry to the Delegate's Lounge for my appointment with Woizero Jodit - one of the most charming and gracious ladies I have had the pleasure of knowing - and the “short introductory chat” went on for almost an hour! I took the liberty of explaining, among other things, that I had every intention of working very closely with the relevant U.N. and its specialized agencies/officials posted to Ethiopia, in the spirit of continuing the very close technical collaboration between WHO, UNICEF, the Ministry of Health and the U.S. International Cooperation Administration which I believe had been established since the early 1950s. I added that this cooperation had been established during the extremely significant and close cooperation of all concerned in the conception, planning and implementation of the unique Gondar Public Health College and Training Center program at a joint meeting in Geneva about 1952. I also stated that I had been informed by the present ICA Director of the Gondar Public Health College, Dr. Brooks Ryder, that the Technical Advisory Committee's work was already well underway and that I looked forward with enthusiasm to working with this outstanding group of public health professionals to make this project a great success.

I explained that my travel plans en route to Ethiopia included stops in Geneva at the WHO Headquarters, the WHO Eastern Mediterranean Regional Office in Alexandria, Egypt, and the stop in Khartoum to meet the Dean of the Kitchener Medical College to discuss possible training of Ethiopian physicians, in case IEG Ministry of Health officials would consider this possibly advantageous in the effort to build up Ethiopia's medical professional staff as well as the paramedical personnel being training at the Gondar Public Health College.

I concluded my comments by asking Wo. Jodit if my plans met with her approval and if she had any further suggestions. She had none and seemed very pleased with the interview and, I presumed she passed the word appropriately.

Thus, Nona, Tom and I soon found ourselves on the TWA flight to London with a same day transfer to Geneva to meet appropriate officials there and, after a very short visit, on to Khartoum to meet with Dean Smith of the Kitchener Medical College. All of this was per prior arrangements; and then on to Addis via Asmara. A suitably brief account of the meetings in Geneva and Khartoum may be found on page 10 of my quarterly progress report for the period from October to December 1958 (see Annex 4, also for use in perusing the overall work plan I had discussed with Dr. Curtis prior to my departure from Washington.)

Ethiopian Malaria Epidemic

Arriving in Ethiopia, I wasn't allowed to have any time to think about Gondar because the minute I got off the airplane in Addis Ababa my staff was there and said, “Dr. Prince, come on, we've got to get to work with the Ministry. Ethiopia is in the grip of a terrible malaria epidemic.” And never having had any experience with malaria epidemics (always having thought of it and been taught about it as an endemic disease), I was astonished. The reasons why such things apparently exist are set forth in a paper which Russell Fontaine and Abdallah Najjar and I wrote in 1961, “The 1958 Malaria Epidemic in Ethiopia,” American Journal of Tropical Medicine and Hygiene. 10, 6, pp. 759-803, November 1961) in which we pointed out the epidemic's likely relationship to the peculiar ecology of the country and lack of malaria immunity among the relatively high altitude inhabitants who were usually not exposed to the disease, confirming also the ideas on the same subject suggested by Sir Gordon Covell of the London School of Tropical Medicine in 1957. (Covell, G., “Malaria in Ethiopia,” Journal of Tropical Medicine and Hygiene., pps 7-16, 1957)

Basically, it had to do with the altitude and meteorologic conditions necessary for mosquitoes to breed under certain conditions (the belt above 5000 feet which normally does not have malaria because the mosquitoes don't breed that high under average circumstances; it's too cold.) But in 1958 things were just right, we suspected, in terms of temperature, humidity, rainfall and the like, for mosquitoes to breed in locations even well above 5000 foot altitude. And unfortunately, the ones that breed in many parts of Africa, including much of Ethiopia, are Anopheles Gambiae, the most “efficient” malaria vectors and the ones that transmit falciparum (cerebral) malaria, which is also the most fatal. (It has a case fatality of maybe 15-20 % untreated and in children under the age of one the fatality is much higher. Nobody really knows, but it is probably close to 50%.) Every effort was made to try to control this epidemic but we couldn't because it was too late. The outbreak was well started before anything could have been done, since, owing to the lack of communications in the country, nobody knew what was happening. It started in the most rural parts of the Ethiopian high plateau above 5000 to about 7500 feet. And it took so long for messages to get to Addis Ababa, because of the remoteness of the affected communities, very poor telephone and electronic communication, and the sickness of the people, that it was three or four weeks before anybody knew that an epidemic was in progress. The result was that, altogether, there were some 3 million cases of malaria and 100-200 thousand deaths from the disease (or maybe more) in the course of the three months from September to November 1958!

Well, we went directly to the Ministry of Health that morning and joined the planning already underway. And the only thing to do was rapidly to get as much chloroquine tablet medication as possible into the country and distribute it, for emergency treatment of all individuals found to be febrile, as widely as one could over the affected areas and also do that as rapidly as possible; for time was of the essence. It was mainly a logistics problem; and that is what the Ministry of Health undertook. From the Mission we sent cables to the U.S., U.K. and Kenya to try and obtain chloroquine tablets in sufficient amounts and in

the shortest possible time to deal with this enormous pandemic (”Regional epidemic” is, perhaps, a more accurate term.) I even fell prey to it myself!

What happened was that, towards the end of the epidemic, Brooks (Ryder) came down (from Gondar), picked up his new DKW [German manufactured] “Jeep” and we went on my first field trip in Ethiopia, by road, in his jeep, with the windshield down. Brooks wanted to sit up where he could see everything. So we went all the way from Addis Ababa to Gondar by road (some 1000 kilometers) via Tigre Province - and other mostly rural areas - to get my first look at Gondar, the “set piece” of the whole program that I was supposed to be working on during the time I was in Ethiopia. Needless to say, by the time we got there we were encrusted in road dirt and assorted bugs; it was nice to find Brook's house so hospitable and, of course, a bath! But as it turned out, some 12-14 days later (the usual incubation period for malaria), I found out I had been “fair game” for the mosquitoes, too; the antimalarial (supposedly prophylactic) drug Daraprim, which in any case, didn't work well against falciparum malaria, was, nevertheless, (for lack of better information) in use at the time. The cerebral “element” was quite an experience, with what felt like a railroad train going round in my head and a fever of about 106 degrees F., until the chloroquine which my colleagues made available to me (even on a Sunday evening as it turned out), went to work. The chills and fever and the railroad train disappeared, and I “woke the morrow morn a better and a wiser man!” But that's another story, so back to Gondar.

The Gondar Public Health College and Training Center

The day of our arrival (on the mentioned “expedition” in Brooks' DKW “jeep”) we had a chance to visit the Gondar Public Health College and Training Center (Gondar) and some of the training health centers in Begemedir Province, as indicated previously, located close enough to the college to provide easy access for faculty to exercise their supervisory functions and yet sufficiently rural in aspect so that they gave the Gondar “interns” experience very much like what they would encounter when they began running health centers on their own. I think that at this point I should introduce the excellent sketches

of the Gondar program that were written by Drs. Lee Min Han (Han, Lee-Min, M.D., DPH, DTM&H, Public Health Advisor, Ministry of Public Health, Addis Ababa, Ethiopia “A Historical Sketch of the Public Health Training Center, Gondar”, 6/10/65 Unpublished) and Wen Pin Chang (Chang, Wen-Pin, “Development of Basic Health Services in Ethiopia,” J. Formosan Medical Association, Volume 68, No. 6, pps 306-321, June 28, 1969). Dr. Han was the first Dean of the college and a WHO employee for many years up to 1958 when he retired but, as he points out in his paper, was asked to continue on as Dean until 1963 when the College became a unit in the Haile Selassie I University and began granting graduate degrees, Bachelor of Public Health (B.P.H.), to health officers after they had completed their training. Dr. Chang was also a WHO employee and a member of the Gondar faculty and chief of the WHO-staffed Health Center Supervisory Team, working with the Ministry of Health to provide direct supervision of health centers around the country and, as well, training the Ethiopian supervisors so that they could take over the job themselves in due course. Dr. Han's paper is, perhaps, the first formal description of how the college got its start that I know of. It was never published so I guess I may be one of the relatively few people in the U.S. who has a copy of this document— yet it is of the utmost importance if you really want to understand the philosophic and technical background of that institution. (Some aspects of which are included in the official WHO/IEG Plan of Operations and the USG/IEG Project Agreement, but not in so much detail.) Dr. Chang's paper is, from many points of view, including its technical content, the more detailed of the two, and, as the reference indicates, has been published in the Formosan Medical Journal.

What Drs. Han and Chang point out, briefly, is that there was no public health program to speak of, before 1947, in Ethiopia. There were no Ethiopian physicians even as late as 1950. So, in that year, the Ethiopian Government requested a WHO consultant to visit Ethiopia to look at the problem of the lack of Ethiopian physicians in the country. The physician-consultant provided by WHO, Dr. Daubenton, in response to this request concluded that, “there is no doubt that training is the most important prerequisite for the

creation of an effective public health administration in Ethiopia and, on this basis, medical and ancillary training will have to be built." (emphasis added.) Two years later, in 1952, a WHO advisor Dr. Rudolf Tesch was, for the first time, assigned to the Ministry of Public Health by WHO. He made an extensive study of the problem of medical education, and the need for training of other personnel as well, and consulted with the Inspector General in the Ministry of Health, Dr. Friede B. Hylander, thSwedish physician already noted here for his extremely sound advice in areas of public health and preventive medicine, during a period of almost 20 years residence in the country.

Dr. Hylander had first come to Ethiopia in 1932 as the representative of the Swedish Red Cross to help the Ethiopian Government deal with the problem of casualties resulting from the war between Ethiopia and Italy during the time of the Italian military attack on Ethiopia and attempt to occupy it (1935-1941). Dr. Hylander had had an exciting experience in this capacity since, when he organized a malaria prophylaxis program for the Ethiopian military, fighting in the Ogaden Desert area of the country, and when it was found to be quite successful in preventing the disease from decimating the Ethiopian military personnel in the area, the Italians apparently found out about it and bombed his Red Cross ambulance! Dr. Hylander was wounded in the attack and had to be evacuated to Sweden where, however, after some considerable time, he recovered fully and then, as indicated above, returned to the country and was given a very high position in the Ministry of Health as a result of his evidence of great dedication to the country's needs and expertise in the field, not only of preventive medicine and public health, but overall tropical medical acumen.

These factors are important to note because of the close connection which subsequently developed during my "watch", between the USAID public health development effort in the country and those of the Swedish International Development Agency (SIDA). In fact, Dr. Hylander was a fine and wonderful person, besides having a thorough grasp of the important principles of public health practice, preventive medicine, and clinical medicine in circumstances under which we all labored in Ethiopia. In addition, Dr. Hylander's

extraordinary capabilities were obviously recognized by the Ethiopian Government and he was appointed as chairman of the General Medical Advisory Board of the Ministry of Health, so that his understanding, of the support for the types of collaborative public health activities and related efforts which were worked out with the Ethiopian Government, before I arrived on the scene and during the time I was there, was of the greatest importance in the success of this collaborative effort.

The account of these various efforts to assist the Ethiopian Government in dealing with the terrific health problems and lack of adequately trained personnel to contend with them, would, however, not be complete without mention of the visit in 1952 of still another “wise man”, Dr. Henry R. O'Brien. He was at that time the Commissioner of Health for the Pennsylvania State Health Department. He came to Ethiopia as a consultant for the USTCA, at the request of the Ethiopian Government, and traveled quite widely around the country, meeting the relevant officials and field medical personnel available. As a result, he was able to make an overall recommendation for the development of health services in the country, which included the establishment of “a demonstration health department and field training school for medical assistants to be set up in one of the provinces, with cooperative support in supplying both staff and equipment from the Ministry of Public Health, U.S. Technical Cooperation Administration, and WHO.” Fortunately, some of the details of Dr. O'Brien's 1953 report were published in Public Health Reports and should be readily available to interested scholars. As far as I can tell, this was the first enunciation of the basic concept involved in the establishment of a training program epitomized by that which was organized in and around the Gondar Public Health College and Training Center.

Q: First, in what context...?

PRINCE: In the context of the establishment of a school for the training of paramedical personnel to fill a gap that was created by the lack of “fully qualified health personnel,” i.e., of physicians.

Q: Just in Ethiopia or worldwide or in Africa ?

PRINCE: In Ethiopia, particularly, though it was a common problem all over the developing world. (However, see below for more details re the major unique aspects of the Gondar idea.) At the point in time about 1952 which we are discussing, there were only two Ethiopian physicians in the country. As Dr. Han goes on to explain; this idea of Dr. O'Brien's was discussed at great length in Ethiopia and finally in a meeting between the WHO group and representatives from the U.S. Technical Cooperation Administration and the U.S. Public Health Service (USPHS) during a meeting in Geneva on February 12-19, 1953. The deliberations of the conference concluded that “the closest coordination and cooperation between U.S. TCA and WHO should be observed in all these matters”. Training programs were considered essential to meet the long range objectives of health programs, namely, the development of health services in a given country (it wasn't just Ethiopia that they had in mind). And the training of several categories of health workers, both as to level and function, was felt to be necessary for this purpose. In addition, while the training of paramedical and auxiliary health workers is going on, it was concluded that the training of teachers in these disciplines should be carried out concurrently and that, these projects should be designed in such a way that the host country can take them over as rapidly as possible.

The presentation of this concept to the Ethiopian Government began to develop subsequent to the WHO meeting; and an agreement for cooperation between the USTCA and the Imperial Ethiopian Government (IEG) was concluded in April 1953 in a multi-project agreement entitled “Public Health Advisory Services.” Among the proposed projects there was one entitled a “Field Training and Demonstration Unit” in one of the provinces. It was to be a cooperative project, however, between IEG, WHO, UNICEF and USTCA; and it provided for a “Joint Fund” which would be contributed to equally by the IEG and the USTCA to operate the entire project. The funds were to be administered concurrently by the Minister of Public Health and Chief of the Public Health Division of

USTCA Mission. That is how this idea was, at length, formalized and finalized in a Project Agreement document in April 1953.

Q: Was it your understanding that this field training and demonstration unit was unique or were they starting this in many parts of the world?

PRINCE: No indeed. It was absolutely unique; nothing of this kinhad ever been done before in the entire world.

Q: But WHO, you said, was thinking about doing this in othecountries ? This was the first?

PRINCE: This was absolutely the first.

Q: The idea of paramedical was not common at that time?

PRINCE: It was not “common” but apparently it did exist, in part at least, as in the health training project in New Guinea, described to me by Dr. Frank Schofield (personal communication), who had worked on the project some years previously and was, during the early years of my presence in Ethiopia, a member of the faculty at Gondar, which gave us a chance to talk about the New Guinea project in detail. Dr Schofield gave me the impression that, although, as I have indicated, this general type of training had been used there to train paramedical personnel, there were three major aspects of the training program that were unique to Gondar, namely: (1) the fact that all the training was to take place in the same institution; in other words, whatever kinds of people were to be trained, they would be trained together so that they all got the idea of working together as a team from the beginning. (2) The second aspect of a unique character was that the teams were to be used to staff rural health centers providing generalized health services (combined preventive, promotive, and curative, with special emphasis on the first two) for the people living in the area served by the system. (3) The third unique aspect of the program (although much less important than the other two), was the fact that it was partly directed through a Technical Advisory Committee (TAC) with almost complete authority

over the administration of the technical aspects of the training program and its planning, development, and implementation; and the TAC consisted of representatives of the various agencies concerned in assisting in the project. These agencies were the Ministry of Health of the IEG, WHO/EMRO, USTCA, and UNICEF, the latter of which was brought in to enable it to rationalize its contributions by way of equipment, supplies and logistics, in support of the college and the training and service health centers.

A fourth aspect (perhaps not so unusual) was the concurrent construction of four training health centers (as distinguished from service health centers where service, not training, was the major objective) close enough to Gondar to be relatively easy of access, but still rural enough to give the students a relevant experience during their training.

Finally, a fifth, and again unique, aspect of the program was the establishment of the “internship year” where the graduates of the college were to receive one year's experience working in these training health centers, under supervision of their training faculty - a type of internship. So the people who taught the academic technical aspects of the program would also have a chance to teach the practical aspects of how you apply this technical knowledge in the context of a decentralized-generalized health program, being run by a team of paramedical personnel with no fully qualified physicians readily available.

Q: How was the college staffed?

PRINCE: The lion's share of the staffing was provided at first by WHO; but the Dean of the College, as per the relevant formal agreement, was to be a WHO employee; and the Administrative Director of the College was always to be a U.S. TAC employee. The chairman of the TAC, of course, was the Ministry of Health representative. But the deputy chair was the U.S. TAC Public Health Division Chief (in addition to filling the position, as mentioned, as Administrative Services Director of the TAC.)

Q: Wasn't Dr. Curtis the first director of the college?

PRINCE: He was the first Director even before the TAC was established. (See Dr. Han's accounting, Annex 6, p.8 para 12.) The TAC, by agreement of the Government, TCA and WHO, was composed of members from both the USTCA and WHO. Their original function was to approve the curriculum for the training courses. In practice, however, the committee governed the operations of the project technically as well as administratively. The committee chairman became H.E. Ato Yohannes Tseghe, the then vice-Minister of Health. He was not the Director of the TAC when it was first established although later on, when Haile Selassie University was formed, there was a change which complicated matters considerably. But in those days - the first five years - it was entirely run by the TAC with the Chief of the Public Health Division of USTCA as the TAC Deputy Director.

Q: First it was Dr. Curtis and then Dr. Brooks Ryder; he was thsecond director, I believe.

PRINCE: Yes. But, I only knew that Brooks was the Director of the College and not the Deputy of the TAC in 1958, when he first came to see me in Jamestown, NY as recounted earlier in this record. That position, of course, fell on my shoulders automatically, as soon as I became Chief of the U.S. Mission Public Health Division.

Q: They ran the college. I remember that the college was staffed with some Ethiopians; but also people from TCA and an international group...?

PRINCE: And many others from Germany, Sweden, and Holland.

Q: There was an international group; I believe WHO provided most of them, although there were a number contracted by the Ethiopian Government, who were refugees from Eastern Europe. I recall Dr. Curtis saying, at one time, after having tried to keep this relatively motley group of people moving in the same direction: “This old world isn't ready for this “One World” business!” (This was the time when Wendel Wilkie had just published a book called “One World.”) Dr. Curtis was discussing his frustration with trying to get them to agree; as, for example, he couldn't get the British and American nurses to agree on how

to make a hospital bed - illustrating some of the problems of technical cooperation among those providing assistance, let alone with those receiving it!

PRINCE: That's absolutely right especially in terms of the complexity of the project. I was, of course, plunged into this completely and I had many difficult meetings with the TAC; and many visits to Gondar to try and sort out some of the interpersonal differences which, almost unavoidably, arose among the staff. By the way I was told.. I don't know whether this was true or not..that before we were finished there were doctors and nurses from 22 different countries who, at one time or another, worked on the staff of that institution! You can imagine that this was a “melting pot” in a small context - a very close knit context. However, where the differences between them became major stumbling blocks at times, it took a lot of effort on everybody's part “to keep the top from blowing off.” And there were technical problems as well, because, for example, some of the surgeons didn't adhere to all the best concepts of careful “scrubbing in the operating room (OR) etc. as some of the others did; and there were arguments about surgical procedures, etc., which went on. It must have been the blessing of the Almighty, the general overcoming force of the desperate conditions that prevailed in Ethiopia, and a great dosage of goodwill, that kept that bunch together despite all these different problems. But it resulted, in my opinion at least, in an outstanding job in the long run, even though the “Derg” (the Ethiopian revolutionary Government) “abolished” Gondar sometime in 1976-77 and converted it into a government medical school (which I was later told was a really second class institution.)

In his review paper, Dr. Han (Annex 6), discusses the results of the meetings of the TAC in terms of the fundamental requirements of the curriculum, which consisted of 45 percent classroom teaching and 55 percent practical work. The duration of the health officer's course was four years; the community nurse and sanitarians courses, in the beginning, were two years, later on to be three years and still did not have the high school certification requirement. Health officers were graduates of secondary schools with School Leaving Certificates; none of the others were secondary school graduates in the beginning. (They all were before the project was completed.) The practical work dealt with maternal and

child health and school health, environmental sanitation, outpatient clinics, hospital wards, laboratory work, health education and concluded with comprehensive experience at the Training Health Centers (THCs), Provincial Health Department experiences, and unscheduled epidemiologic studies, which encouraged the inquisitiveness and scientific research methodology we also wanted to instill in the minds of these excellent young people. And the result was that there was an interesting consequence... a feeling of upward mobility, especially in technical matters of medical and public health relevance among all the students but especially among the student health officers; they began to appreciate the importance of getting an even better education than they were already getting at the college and so they wanted to achieve a baccalaureate degree so they could work toward an advanced degree later on. And why not?! (See below for the arguments that ensued!)

We had quite a battle about this in the Ministry of Health, I may say, in the Ethiopian Medical Society and it even extended to the halls of the United Nations. Thus, when in 1963, WHO and the United Nations called a worldwide meeting to be held in Geneva on the subject of the “Application of Science and Technology for the Benefit of the Less Developed World”(UNCAST), and the Ethiopian Government didn't have any body to send to that meeting, they asked me to write a paper and deliver it as the “Ethiopian Government representative.” I did that, with the essential help of the Vice Minister, Ato Yohannes Tseghe and my staff. I presented the paper, “The Application of Modern Methods of Public Health Practice to the Solution of Health Problems in Ethiopia.” It was published in the Transactions of the meeting (Prince, J.S., Tseghe, Johannes, Spruyt, Dirk, “The Application of Modern Methods of Public Health Practice to the Solution of Health Problems in Ethiopia” UN Conference on Application of Science and Technology in the Less Privileged Nations, 1963) and, I presume, is still available. (However, to make access to this paper as easy as possible, I have attached it as Annex 7) The thrust of the paper dealt with all of what I have said about the way in which the technically qualified people... a cadre of properly qualified health workers had to be established and a proper

philosophy, strategy, and mechanism developed for them to work together in dealing with the kinds of health problems afflicting countries like Ethiopia. And the concept of training together—the three kinds of health workers together in the same facility, as teams—was strongly emphasized.

But in addition, in discussions of the paper in Geneva (and Yohannes agreed I would do this), I proposed the idea of giving the Gondar health students, beginning with the health officers, the necessary incentive to progress by allowing them the possibility of moving up a career ladder. And that created the biggest uproar, you wouldn't believe it. There was such a commotion that the head of the conference, Sir John Charles, said, “well, ladies and gentlemen, we can't discuss this here in open meeting that is being recorded. It is much too complex and difficult a concept so I am going to schedule a private unrecorded meeting... not really a private but a non-recorded informal meeting in one of the committee rooms tomorrow afternoon.” The meeting took place and some of the doctors, from West Africa particularly, raised big objections with me for even proposing the idea of providing the health officers a chance to become doctors by earning a baccalaureate degree and the possibility of attending medical school later. They felt that, if this was done, the health officers would all leave their “postings” and want to go to medical school and not stay as health officers working for the most part, in the rural health centers. In effect, they felt, “once they've trained as health officers they should remain in that posting; otherwise you won't have any in a few years.”

We realized in Ethiopia that this could be a problem; but one of the requirements in our plan, we pointed out, was that the health officers would have to serve for about four years as health officers, mostly in rural health centers, before they could apply for their advanced degree training. In addition, we had what we felt were perhaps some more constructive views: indeed, the health officers might later become physicians and not stay in the health centers; but health centers were not the be-all-and-end-all of the organization of health service programs in developing countries... or in any country with large, mostly rural, areas, underserved by health personnel well-qualified for the job. In

any case, I had put into the document the questions that we had to look to, in Ethiopia and all developing countries, including the concepts of organizational development of the necessary administrative and functioning framework for delivering decentralized, generalized health services. That translates into the need for trained public health physicians at the supervisory and coordinative organizational and functional level of a country's health services and not just at the most rural or other health service delivery levels!

Finally, to cap the whole discussion, Mr. Shubik, Minister of Health for the Ukraine, said, “Dr. Prince is right. Feldshers (rural health workers) in the USSR can go on to become university professors if they have the determination and capability; and several have done so; and this has caused no harm to the staffing of the health care system. In fact, quite the opposite. And most feldshers do not leave their posts for more advanced work even though they have the opportunity to do so.” (Needless to say, I felt very much in Mr. Shubik's debt for his kind and conclusive support on the matter and thanked him for it most sincerely when the meeting disbanded very late in the afternoon.)

Q: What happened to health services in Ethiopia?

Beginnings of Decentralized/Generalized Health Services in Ethiopia

The above-described issues also had to be addressed in the context of the difficult communications and other obstacles to carrying out the necessary tasks. So to do that, you had to decentralize the authority and responsibility for running health services to a peripheral level. And in the discussion I said “We have had a model in New York State for some years based on the “development of district health services” and I don't think we can succeed in Ethiopia or any other developing country without doing something similar, in other words, decentralizing the services, as Emerson put it so wisely in his famous analysis of “Local Health Units for the Nation.” And, much to my amazement, several years after the UNCAST conference discussed above, when one of the Emperor's

administrative and legal staff returned from graduate training in the U.S., I heard that he had been instrumental in writing a new section for the Ethiopian Government Awraja (District) law which was published in the Negaret Gazetta 14th of March, 1966, under the heading of “Local Self-Administration.” It contained a number of sections extremely pertinent to public health law in Ethiopia and I found out, when I noticed several sections of the new law which, unbelievably, seemed to resemble closely some provisions of the New York State Public Health Law, that the mentioned Ethiopian Government lawyer, apparently working immediately under the Emperor's direction, had received his graduate training at the Maxwell Institute of Public Administration, Syracuse, New York! Since the law seemed to decentralize authority and responsibility for public health administration to the Awrajas (districts), I asked him, “where in the world did you get this...” And he indicated “well, you know, you have very good decentralized health services going on in the U.S., and especially in New York State, and I found out all about it at the Maxwell Institute; they had a record of the whole thing and I believe we ought to have something like that in Ethiopia; and the Emperor agreed! My, what a coincidence! And here I was, privileged to see everything “come full circle,” provided, of course, that it worked!

Q: So you came full circle?

PRINCE: Yes, I suppose one could say so. This form of decentralization of health service organization (the district level decentralization) was proposed for adaptation (not adopted) on a worldwide basis by WHO at a conference in Harare, Zimbabwe in August, 1987, entitled “Interregional Meeting on Strengthening District Health Services.” This conference was attended by ministerial representatives from many countries around the world, along with some of the WHO country representatives (W.R.'s), their headquarter staff officers, and attendees from WHO HQ in Geneva, the WHO Regional Offices, representatives from several of the other UN Specialized Agencies, and from a number of other private voluntary organizations.

(See Annex 8 for a selection of some of the most important documents from this meeting which, by the way, should also be considered in the context of the “International Conference on Primary Health Care” held in Riga, in what was then the Latvian Republic of the USSR, under the auspices of WHO and UNICEF, in March of 1988. The conference was held as a celebration “of the tenth anniversary of the declaration of Alma Ata” of September 1978 and was commemorated in a publication entitled “From Alma Ata to the Year 2000, Reflections at the Mid-point.” (”From Alma Ata to the Year 2000, Reflections at the Mid-point.” World Health Organization, Geneva, 1988 (Preface by Dr. John H. Bryant, especially see pg.155)

This publication describes the problems in implementing the Alma Ata Declaration as seen from the WHO and, no doubt, many other worldwide viewpoints, and to consider possible initiatives that might be taken by all concerned to strengthen the original initiative and ensure at least reasonable progress toward achieving the objectives set forth in 1978.

The reason for this comment is that the mentioned document implies that this ten year retrospect did not come up with an entirely optimistic view of the chances of its achieving “Health for All-by the Year 2000” - a goal which was the ultimate of the Alma Ata Declaration. This distinctly modest approach is typified by the heading of the substantive material which deals with details as it goes along for the rest of the publication, e.g., “Health for All - Wishful Dream or Living Reality?”

The strange thing about the document, at least as it strikes me, is that although the next 115 pages are filled with many different kinds of recommendations, including several major references to strengthening district health services within the Ph.D. system, none of them seem to relate in any definite way to the conclusions reached at the conference just the year before in Harare, which dealt with what seems to me to be a fundamental requirement for the achievement of the Alma Ata objective, namely, attention of a most

detailed and determined type to the overweening problems of health service organizational development throughout the world!

This is, indeed, strange since, as far as I know, the Harare conference did exactly that, even including a quite detailed curriculum for the attendees, parts of which I have included in the Annex 8 but notthe entire document because it is quite long and very detailed. It is also strange because Dr. John Bryant, who wrote the preface for the entire document and I think must have had considerable editing responsibility for it, in summarizing the interpreted actions recommended at Riga as focal points for future concern, wisely included the following rhetorical statement which, if it were given substance could really make quite a difference if it were to be focused, among other worthy objectives, on the problems of organizational development: “It is necessary to look over the horizon, beyond the turn of the century to the problems of that time, some continuing to the present, others emerging as entirely new. The capacity for dealing with those problems needs to be strengthened further between now and the year 2000. It is likely that a very important long-term contribution of the “health-for-all-movement” will be to establish in every country, and in every community, an evolving capacity to deal with the health problems of that place and time.” (Emphasis added.) (Ibid., page 74, paragraph 5)

But as I have already said it doesn't seem as though the Riga Conference or any otheWHO conferences or assemblies have grappled, fundamentally, with the hard nugget problem of the necessary organizational development of health services, specifically the decentralization of authority and responsibility to the logical governmental subunits within each of the member countries of the United Nations, all of whom were signatories to the Alma Ata Declaration in 1978!

Q: It hadn't been adopted before 1987?

PRINCE: No, not really. WHO had thought about it but they hadn't made it official. This was probably the true “launching” of the concept of the Strengthening of District Health

Services, by WHO. (I've underlined the word “District” because for years WHO had developed programs in keeping with the Alma Ata Declaration for “strengthening health services.” But the concept of placing the primary government focus at the District level was a new idea in many countries, and even with WHO, the concept having been approved by the General Assembly only in 1986, the year before the Harare conference.)

Q: Even though it was already going on in quite a few places?

PRINCE: That is correct. So my contention is that if you are looking for the seeds of the modern concept of practicing public health services that you now find in developing nations you have to come back to Ethiopia. I believe they were the first developing country in the world really to concentrate on the whole thing from the bottom up with an integral training program and everything else. All of which was aimed, fundamentally, at this concept of organizing a system of decentralized-generalized health services with the required organizational and governmental locus, namely, the Awraja (District) espoused in the WHO Conference referred to above some 22 years later!

In fact, if one takes a close look at the history of the development of the concept of decentralizing health services, as part of a required overall organizational development emphasis, then one must also figure out how to re-jigger the technical parts of the program, and the training of necessary technically qualified personnel, to fit the whole plan! For an idea about how to deal with this problem, one needs to go back to the work of Dr. Herman Biggs in New York State beginning in late 1913 and lasting up to about 1930 during which time he was Commissioner of Health for the state, and during which time he also succeeded in introducing the concept of the establishment of decentralization of health services in the state to governmental units called Districts—a concept which was embodied in the New York State Public Health Law in 1923, effective May 21 of that year (”The Consolidated Laws of New York Annotated” Book 44 Public Health Law, Edward Thompson Company, January 1943. # 4A Public Health Law of New York State, article 2.).

The first paragraph of this highly significant statement reads as follows, “The commissioner of health shall from time to time divide the state, except cities of the first class, (the law states that these cities have to have their own full-time health departments separate from the state districts that are established by the section) into 20 or more sanitary districts. He shall appoint for each such district a district state health officer who shall be a physician. Each district state health officer, under the direction of the commissioner of health and subject to the provisions of the sanitary code, shall, in addition, assume such other duties as may be imposed upon him, and perform the following duties.” Then it lists 12 such duties which I won't go into - suffice to say that they cover everything that a local health officer could possibly consider himself responsible for. But the last one of the 12 gives some idea of the power that is granted to district state health officers under this law and the degree of complete decentralization, therefore, of the responsibility for carrying out the tasks and responsibilities of a local health officer. This item number 12 in the list of duties required by the law reads as follows:

Act as the representative of the state commissioner of health, and under his direction, in securing the enforcement within his district of the provisions of the public health law and the sanitary code.

And finally in notes of decisions under this legislation reference is made on page 4B of the addition to the same provision of the law, of the following legal caveat:

District Officer—under subdivision 12, each District State Health Officer is authorized to perform the duties of the Commissioner of Health within his district and specific authorization by the Commissioner to perform such duty is not necessary. April 2, 1941, opinion of Attorney General.

Furthermore, as I have mentioned previously in this account, and following the recommendation of Haven Emerson in his famous article of 1945, (op sit Emerson 24). The New York state legislature went ahead further with Emerson's doctrines and

authorized establishment of county health departments as a further effort to decentralize such services in the state. The reader may recall that my assignment to the Jamestown District of the New York State Department of Health, in 1948, had to do not only with carrying out my normal duties as District State Health Officer resident in Jamestown and Chautauqua County, but also to concentrate on the task of convincing county government officials, including the board of supervisors, and the appropriate groups of decision-makers in the private sector, especially the members and officers of the county medical society that a county health department would be “a good thing” for them and the county.

As indicated, I began the above-described effort in June 1948; but the suggested County Health Department was only established 16 years later! If one looks at this as a “development project” one should not therefore be surprised that such projects require at least a decade of effort on the part of cooperating agencies/donors/PVOs in today's world! Without being accused of putting words in people's mouths, I would like to suggest that, perhaps, some of these occurrences and ideas had at least something to do with the much later conceptualization and planning that lay behind the convocation of the WHO Interregional Meeting on Strengthening District Health Systems in Zimbabwe (to which I have already referred and for which I have attached copies of some selected documents in Annex 8, dated August 3, 1987).

Q: Maybe we are getting ahead of ourselves but it would be interesting to know what has happened to that program in Ethiopia?

PRINCE: I will come to that, but the answer needs to be seen in the context of some of the ideas that were developing in the United States concerning improved methods of evaluating the impact of public health programs on the health of target populations. One has to realize, that possible ways of doing this, even in the U.S., were quite rudimentary in the 1950s. But there was a lot of thinking going on about the importance of the problem and finding better ways to solve it, as evidenced by the interest in the part which might be played by social science research methodology, which, as I have already mentioned,

I learned about at the Department of Social Relations at Harvard. So conceptually, the D&E [demonstration and evaluation] project was to a considerable degree a follow-on to the ferment in thinking and methodology that I suppose one might say I and many others “inherited” from our mentors and which proved quite “infectious” among people in the Ministry of Health and in the medical profession, generally, not only in Ethiopia, but also in many other developing countries where U.S.-trained higher level professionals had postings from official USG agencies in the health field.

And I think that this is a lesson that needs to be taken to heart in terms of what we are trying to do in helping people around the world, especially in developing countries, to improve their own welfare. Clearly, it seems to me that the D&E project in Ethiopia, as well as the whole program for improving health services delivery in that country, and what AID has done elsewhere, showed us that what we really need to do to get in motion in these countries, is to train top level professionals with a global interdisciplinary view of things so that they in turn may teach in top level professional schools and, as appropriate, in paraprofessional schools, because they can have such a profound influence on their students' thinking. And their students could then “carry the ball” worldwide as appropriate, and may well become leading officials and innovative thinkers and policy makers in their own countries.

In addition, it seems to me that the projects in Ethiopia in health and agriculture showed us that we had to put a lot more emphasis on providing opportunities for institutions of higher education in the U.S. to work with the developing country institutions of higher education in the third world to help them achieve the kind of objectives in training and policy innovations that I have just mentioned as well as to avail themselves (the U.S. institutions I mean specifically) of lessons to be learned from experiential and training programs in the third world countries where they (the U.S. institutions) have established relationships with the mentioned institutions of higher education.

And lo and behold, here in Arlington we have the UDLP, (the AID University Center for the Development Linkages Project); just the thing I was talking about. Nothing could be more gratifying to a university professor, I'm sure, than to see something like this happen and evolve, through an innovative process like the understanding of what is really required in order to achieve the objectives or perhaps, more generally, the goals which everybody has agreed on for years! It was just a question of how we got there that was not agreed upon. Now I think the policy and strategy has been accepted all over even, perhaps, in terms of the new (1993) World Bank policy and strategy.

And therefore I think the answer to your question about what happened to the D&E project and the Gondar program in Ethiopia is to say that it probably had a major influence at the very least, in accelerating the implementation of policy changes necessary to achieve these goals. So I think that this is a fundamental component of the whole concept of technical cooperation in the development process around the world. And that is why I say technical cooperation rather than technical assistance; it is really technical collaboration at all levels that has to be achieved and this, ideally should result in clearly multidirectional benefit flows when the whole process has achieved maximum progression of sustainable development.

In Ethiopia, I believe, the donor and appropriate governmental agencies, at least, approached this concept at a much earlier historical stage in the technical cooperation field than most other (certainly not all) developing countries in the world. And this, in answer to your question, could be considered one of the long term results of widely ranging health and agricultural programs which we helped the country institutionalize, I believe, to an extraordinary degree. In fact, even though, for example, the health program was nearly emasculated under the Derg, it seems to have “sprung back” to a considerable degree in the last few years, judging from personal communications I have had with Dr. Joyce Pickering and others of the McGill University team which has worked in the country for the past 10-15 years, in continuing to collaborate in the institution building process.

Q: Are you talking in general or just in the public health field?

PRINCE: I think I am talking in general too since, as I have already indicated, these innovative approaches both in terms of development of services, training of personnel, institution building were going on in Ethiopia in agriculture with the extraordinary Oklahoma State University project at Jimma and Alemaya (where there is a multi-disciplinary training institution known as the Alemaya College of Agricultural, Mechanical and Industrial Arts, located in the town of Alemaya in Harar Province).

Having arrived in Ethiopia with social science research ideas under my belt and dealing with the malaria epidemic and a number of other categorical disease programs in addition, encouraged me immeasurably in my efforts to move the Ethiopia health program in the direction, perhaps, of being one of the most comprehensive of any TCA (and later AID) had undertaken up to that time, because it dealt not only with communicable disease control projects, but with administration, management, organizational development, and technical aspects covering the entire disease spectrum... maternal and child health, adult health, environmental health, etc. Further on, this did, I hope, become a good example of what I choose to call international health technology exchange. (Neumann, A.K., Carlson, Dennis, M., Lourie, Irvin M., and Prince J.S. “International Health Technology Exchange-A Multidirectional and Multidisciplinary Road,” Royal Society of Health Journal, June, 1979) & Annex 9

And that same “D&E Project” in Ethiopia you just asked me about was part of the “technology” I had in mind when I accepted the assignment for AID work in the health and medical field in that country. This particular field of technology had a name-”Operational Research”!-and that's what it became; and the next chapter is about how we applied it to the wide-ranging scope of work I seemed to be given for my assignment in Ethiopia. (See my Quarterly Progress Report for the last quarter of 1968 and the first quarter of my work in Ethiopia)

Demonstration and Evaluation Project in Ethiopia

So, we included the Demonstration and Evaluation Project as part of the Mission's overall program in the country. However, in the beginning I had difficulty securing the Mission's agreement on two major points: one was that I would not go ahead with further design of this project without involving the Ministry in the process (and the Mission demurred). (You may recall the E-1 Project Paper, which was part of the Annual Budget Submission, was not supposed to be discussed in detail with everybody in the host government.) And I said, “Well, you know, let's face it, I have had a lot of experience with this kind of situation in my work in Chautauqua County; and I can say that if I had gone into the communities... to the leadership of the communities, without first involving them in the design of the research survey questionnaires I would not have gotten to first base. Furthermore, I had to interview about 1200 people in the community and they all knew something in general about this project because we were properly authenticated as doing work for Harvard University, which was considered very prestigious for the respondents... so they were glad to cooperate with us. Thus it wasn't a cold turkey operation... in no way! So in Ethiopia, I said to myself I don't think we'll make that kind of mistake (”cold turkey approach”); I don't think the research effort would have had a chance of succeeding without community collaboration, because we knew we were going to be interviewing people in communities some of which in Ethiopia were way out in the boondocks. And if one were to go to them, without the Ministry of Public Health “papers” giving us authority to administer this project we would have had big problems getting statistically valid results, to put it mildly!

Having discussed these issues with the Mission, they agreed to this approach and then I sat down with the late Excellency Ato Yohannes Tseghe, Vice-Minister in the Ministry of Health, and one of the first people I felt I should ask to help us design the project and to my great relief, he said he would do so with pleasure!

By that time, I had become a member of the General Medical Advisory Board of Health, which was like the Public Health Council of New York State, the highest authority next to

the Minister himself, in the establishment of technical policy and strategy of the Ministry. So I presented this whole idea to His Excellency Yohannes and the Board in great detail and we had several extremely interesting sessions in discussing the content of the questionnaires and the way in which we were going to handle the data, etc. Thus, the Ministry was fully aware of all the technical details as well and HE the Vice-Minister, who was also Chair of the mentioned Medical Advisory Board of Health, was asked to write the Foreword for the journal article and to serve as a coauthor. He accepted both requests and made a number of very valuable other contributions to the paper. About seven years later, thanks to the Herculean labors of my staff, especially my secretary, June Bruce, and the UNESCO officer assigned to assist the Artistic Printing Press, who volunteered to expedite the publication of the article, complete with photographs, had it ready for publication on schedule. Because I suppose it was felt that the journal article had possible international significance, it was felt that it needed to be approved by the Ministry of Interior, which it was, without difficulty, before publication in the Ethiopian Medical Journal in 1967. (Spruyt, Dirk J., Elder, Francis B., Messing, Simon D., Wade, Mary K., Ryder, Brooks, Prince, Julius S. Tsegue, Yohannes, “Ethiopia's Health Center Program-Its Impact on Community Health” Ethiopian Medical J.-Conference Supplement-3rd Annual Meeting, Ethiopian Medical Society of May 1967, Vol. 5 No. 3 July 19, 1967) &Annex 10

The project began with the decision, first of all, concerning the question of how many communities it was possible to study in the context of trying to select the appropriate number of “control” and “experimental” communities ... to get the baseline done, and then to have sufficient time between the completion of the baseline study and the study to be carried out after the application of the change agent. In this case, the change agent was the health center staff and services; and the sample size and degree of change had to be sufficient to obtain statistically meaningful results, assuming a difference in the tested parameters, e.g. infant mortality, of at least 10%. I might amplify this by pointing out that the effort was to follow a kind of “case/control scenario” using the true experimental method, which, in this instance, would consist of the study of x number of communities,

half of which, the “experimental” communities, would have the change agent introduced (in this case the health center and staff) and half of which would not have the change agent and were, therefore, termed “control” communities. All were arranged in matched pairs for purposes of statistical analysis of the relevant data. Thus, this x number of matched pairs of communities was further chosen so that we could have one pair in the highlands, one pair in the tropical rain forests, one pair in the savannah area, and one pair down on the Red Sea Danakil desert; because obviously the ecologic factors would influence things greatly in terms of the health/illness spectra in the various communities. And if we were to try to compare, e.g., four health center communities with four control communities in different parts of the country the confounding errors would be much too great. So we had to compare them by matched pairs. When that was agreed to, then it was only a question of how many such pairs of communities could be handled from a logistic point of view. We finally decided to do four pairs; but, with respect to the fourth pair, one of which was to be located in the desert ecology in the Danakil depression near the border with Somalia, unfortunately, we were never able to secure the approval of the local power structure in the region. The Danakils were very suspicious of the plateau Amharas - and some things also happened in terms of “Shifta” - thievery action - down there which caused big problems for the government and made it, more or less, impossible for us to work there on a community basis. So we had to abort the fourth pair representing the desert ecology. Too bad! But the sort of thing that can happen in many parts of the world where the communities” social base may not always prove stable even if all efforts are made to create a relaxed relationship.

The three pairs of the chosen communities were then matched by demographic, sociocultural and ecologic background as nearly as possible. So the question then became... how much time must you allow between the baseline and the follow-up study of results of change-agent action to expect meaningful results? The problem was, of course, time because this was an expensive study and we had a big staff and a lot of logistics which were also expensive, and the usual, pretty much fixed, project budget. So, we

finally concluded that the maximum time interval required between baseline and follow-up surveys for a possible project impact would need to be kept at or below 24 months.

We set about the details, including follow-up, based on the philosophy that I have already mentioned which is “we don't do this kind of thing anywhere without the proper introduction.” Hence, before we began the actual survey in any community we first sent a “reconnaissance team,” which met with easily identified members of the power structure, e.g. the town elders (equivalent to a town board). The team went to the chiefs, the governor, and other top people in the community, and explained what this was all about. “It was important for the future of that community and the future of the country.” I had already established this concept with many of the elders and chiefs and other people in several parts of the country because, in furtherance of the Ministry of Health's interest and our presence there, the Emperor wanted health centers developed eventually throughout the entire country. In order to do that we had to follow the same philosophy when going to the towns where the health centers were to be established and to explain what the purpose was and then ask permission to put a health center in a certain place. Oftentimes there was no land readily available and the elders had to get together and agree where we were going to have the land, and who was going to contribute it, etc. When such contributions were agreed to, arrangements were then made through the same process of mutual negotiations to assign the donor other more or less equivalent land to use as his own. This was often a complex process, but, because, I suppose, all parties achieved high or increased status for an action perceived as so beneficial to the community, the negotiations were usually completed promptly. And I found myself, often enough, in the position of representing the Ministry of Health in these visits, as I often didn't have anybody with me except my driver, Ato Mersha Mandefro, serving as a guide, as well, and one or more local officials who could also serve as interpreters when needed. The people in the villages and towns were very, very cooperative when we explained to them what the purpose of our visit was.

The same approach was adopted by the research team once the recce team had completed its work. And in this latter instance the power group leaders in the communities agreed that taking stool and blood samples to test for amoebiasis, dysentery, malaria, schistosomiasis, etc. was something that was foreign to them. As a reward for making this possible, we also provided treatment, on request, for the people in all the villages that we studied while we were there. And if we found something serious in our patients that required evacuation to the hospital or whatever, we tried to arrange for this as well. So, by and large, we received the cooperation of most of the people in the communities, and that's why we had a good turnout for the interviews, physical examinations, blood tests, and stool samples, etc., all of which was necessary to obtain statistically valid results.

But the logistic details were, otherwise, horrendous. We had to have everything transportable by C-47 in order to get to some of the research community locations, which, as I have indicated, were chosen to be characteristic of the Ethiopian “countryside.” Consequently, they were in several cases remote enough so you really couldn't get to them by road! And you can imagine what that meant! But anyway we managed. We had a very hearty, tough and determined but compassionate team of researchers before we were finished, believe me! Furthermore, it is important to note that a goodly percentage of the staff that went on these D&E field trips, and did much of the work were Ethiopians. Some of them were health officers, some laboratory technicians, some sanitarians and some community nurses. All of them, with their background in public health already received from the Gondar Public Health College and Training Center program or prior laboratory experience, made excellent workers on the project. It is also important to note again that our official interpreter, Ejetta Feyessa, was extremely accomplished in handling most major Ethiopian languages, and some dialects as well. Quite a feat!

So in due course, the research protocol was carried to completion and we put the finalizing touches on an article to be published in the Ethiopian Medical Journal the day I went on my last trip from Ethiopia to a meeting in Kampala, Uganda, on population problems in

Africa... the beginnings of the USAID assisted population program on that continent! (As noted previously, such programs had already begun with assistance from private voluntary organizations - PVOs - such as POP [Population] Council, IPPF, Pathfinder and others, and had been underway in some places for several years.)

Q: When was this?

PRINCE: In mid-1967, a short time before I left Ethiopia to take up my new Post as the first population adviser to AFR/AID [Africa Bureau at AID/Washington].

Q: Didn't you have some problem with the Washington office about funding that D&E project?

PRINCE: Yes, I mentioned the problem earlier and I forgot to go ahead with the discussion of that issue. In 1965 the USAID Research Advisory Committee (RAC) was asked to review our project.

Q: The research advisory committee of AID?

PRINCE: Yes. It was a committee established by AID in the Fowler Hamilton (former AID Administrator) years. This was the time when the school of thought was to emphasize the prime importance of the economic aspects of development vis # vis other aspects. So the technical assistance the (technical cooperation parts) of our program were being examined most thoroughly and/or “getting the axe” financially and literally as well.

The “change of emphasis” is something else and many of those who went through it may still remember it. But, just in case some of my readers may not recall what happened, I can remind them of the fact that it was when Congress wanted AID to start cutting the budgets of all development projects funded by the Agency which were deemed not to contribute, as directly as others, to the economic aspects of development. This included health programs generally, and the Demonstration & Evaluation Project especially, perhaps because the

RAC had concluded that the project, from a technical point of view, was not worth the money being put into it. It was generally concluded that Congress wanted the Agency to limit the number of African countries receiving bilateral, i.e. direct assistance from the U.S. But, of course, by that time we had spent some $600,000 on the project (the total cost of which was $900,000 by the time it was finished in 1967.) In those days that was a whale of a lot of money. The fact that two-thirds to three-quarters of it had already been spent on the research didn't seem to bother the RAC; they thought it should be cut off! So, when Dr. Leona Baumgartner became the head of the Office of War on Hunger about the same time...

Q: IICA?

PRINCE: Yes in ICA, (rather, AID by that time), she came to Ethiopia in late 1964, I believe, to look at our program and we went on a field trip to study several health centers in a remote area. During our conversation, I said, “Leona, we've got to do something about this situation in Washington. I think it would be a disaster to terminate the D&E project now. It's the first time anybody has really tried to evaluate the impact of any of our AID programs in scientific terms. And, perhaps they want to kill it because it doesn't fit the norm... the classical “bench” type research work that some of the RAC members may prefer, or the economic paradigm that some in AID seem enamored of. Then I asked her, “What do you think we can do about it?” She said, “You'll have to come to Washington and defend it.” I said,” I doubt that I can do that on Government business, so I'll just take home leave (due shortly) in any case and, the small additional costs won't matter as I can pay them myself. It's worth it.” She said. “Well if you do, I will give you every assistance I can. “So I went in the early fall of 1965, I think it was, and Leona managed to get Hutchinson (Ed Hutchinson, Assistant Administrator for Europe and Africa, AID) to agree to hold a meeting on the subject of the need for proper funding and completion of the D&E project in Ethiopia. I believe Steve Christmas was also there in a strategic position, as he represented AFR/Development Planning. There were, perhaps, 8-10 people at that meeting and we certainly had a very serious discussion, as I recall it, although not quite a

knock down and drag out fight! Finally Leona turned to Ed and said, “What's the matter Ed; you know perfectly well that this project is necessary. Haven't you got any money?” And he looked at her and kind of threw up his hands and said “That's not the problem, but, ok, I don't think you are right but I'll just take a chance on it. There is only another $200,000 to $300,000 involved and $600,000 has already been spent. So Prince, you go out there and get this job finished; don't dawdle, get cracking.” So that was that, it seemed to me then and still does, that Leona and several other friends of the project, especially Steve Christmas and Clayton Curtis, saved the day. (See Annex 11 for correspondence and documentation of what I believe was this meeting, although it is possible that the meeting that I just described may have been followed by another, of a more formal type, in order officially to authorize the preparation of the necessary IAD for funding of the project to its conclusion (Further study of my records shows that this is, indeed, what happened. The meeting approving the IAD was held on December 26, 1965.). Anyhow, looking back on it now, can you imagine what a hindrance to sound project planning it would have been if we had not been able to show, at a sufficiently early stage in our project development and implementation experience, that at least it was possible to evaluate some significant aspects of actual project impact. For clearly it was the only way in which the Agency could have been reasonably sure, that what it tried to do in the future, would prove to be successful, or not, in achieving outcome objectives!

Q: Are you aware whether the methodology was being used elsewhere, or were we learning from this process?

PRINCE: That's rather a long story. Bits and pieces of the methodology had been tried in the U.S. and elsewhere. In addition, reference should be made to the work by Dodd in Syria in 1934, Weir in Egypt, in 1952 (Annex 13), Getting and colleagues, at the University of Michigan in 1960s, and Taylor and Faruquee in Narrangwhal, India in 1970s, (the latter published in 1983) But, as already mentioned, we certainly were in a learning mode

throughout, and nobody had any illusions about that—even our two most highly qualified consultants in epidemiology (Al Buck) and demography and statistics (Matt Tayback).

In addition, the work done by the Commission on Health Research for Development, under auspices of some 16 donors from Europe and North America, and Latin America with special acknowledgment to the Edna McConnell Clark Foundation (United States), International Development Research Center (Canada), and the Gesellschaft fur Technische Zusammenarbeit - (Association for Technical Cooperation - not a Government of the Federal Republic of Germany agency) having supplied more than 12% of the Commission budget. However, the list of special reports and actual publications contained in the bibliography and reference notes of the mentioned extraordinarily detailed and significant study, contains only a very few references to research projects in the 1970s and none at all prior to that time. So here we have the Agency trying to develop an historical archive of its actions and accomplishments, yet its computers appear to have insufficient capacity to store the data from the earlier projects.

There was obviously an explosion of interest in the kind of research we are talking about in the 1980s, but this long postdated the work that we did in Ethiopia, which, as I have already indicated, was published in July 1967, some 30 years ago. So it seems to me, the answer to your question has to be that, although these bits and pieces of the methodology, had been tried, either previously or concurrently with the work we started in Ethiopia in 1959-60, it is probably fair to say that the full methodology for the application of qualitative survey research techniques, and a modicum of the quantitative approach, as an interdisciplinary application of both social science and epidemiologic health service research methodology (importantly including the testing of the logistic and related difficulties involved in doing this kind of work in developing countries), was pretty much pioneered by the D&E project in Ethiopia. So we certainly had to be in a learning mode throughout that entire project period of operation. Some further detail concerning the

projects in Guatemala and Narrangwhal is provided in pages immediately following these comments.

However, we weren't very far along in the 1970s before it became “de rigueur” to include an evaluation section in every Mission initiated project paper, not to mention a section on social soundness, and the overall careful analysis required to prepare a logical framework which, of course, requires one to detail the objectives and methods of achievement of the evaluation component of the project along with all the other details that are involved in preparing the proposal. (See Annex 12 for the “short version” of the Logical Framework scheme developed by Practical Concepts, Inc., a contracting firm working under an AID contract to develop the Framework, ca November 1980.)Q: Was the methodology you used in the D&E Project something that was picked up by other projects?

PRINCE: I believe it was; and the proof of the pudding, I guess, would be the fact that this general methodologic approach to impact evaluation was used not only in the Ethiopian Demonstration and Evaluation Project (1960-67), but as well in the USAID/AFR/ACCRA-assisted Danfa project in Ghana (1969-79), and the Narrangwhal Project (1967-74) carried out by the John Hopkins University School of Hygiene, the Government of India, and the Indian Council on Medical Research. In fact, as you know, at the present time, no Project Paper prepared in an AID Mission, and funded at the Mission level, can be accepted for further processing in AID/Washington unless a Logframe, including a Project Evaluation Component, is integral to the completed Project Paper. In addition, the similarity of the research methodology employed, including the comparison between the experimental and control community or sample population being studied, the use of carefully identified baseline and follow-up surveys, and the interdisciplinary (often including a social science component) is common.

In addition, I have here a number of documents that might flesh things out a bit. For example, in the D&E project paper and the publication in the Ethiopian Medical Journal, we referred to the fact that the idea of evaluating impact was not entirely original with us

and in fact had been undertaken by the Rockefeller Foundation and Dr. John M. Weir and his Egyptian colleagues from 1945-1952, in Egypt in a study which was published in the 1958 Journal of the Egyptian Public Health Association entitled: “The Evaluation of Health and Sanitation in Egyptian Villages.” However, we also pointed out that the work was limited almost to sanitation - not much about general health programs - and the sanitation part was mainly fly control and it wasn't very instructive, as the methods used did not apparently work very well. But there is the document; and it should still be of considerable value to readers interested in the history of impact evaluation in international health. Since it may be difficult to find elsewhere, I have attached it as Annex 13. (For the interest of my medical colleagues who may read these pages, one must always be aware while working in tropical areas that, particularly in these days, one has to bear in mind not only the usual communicable diseases but also, primarily because of the ongoing demographic transition, always to consider the possibility of non-communicable metabolic and similar diseases. This simple fact was driven home to me by the chief pathologist in the Regional Hospital at El Obeid, capital of the Kordofan Region in Sudan, told me during a seminar I was chairing at that institution about 1981, “Dr. Prince, you know it's not all diarrhea and vomiting here, but hypertension, nephritis, cirrhosis, etc. as well.” And how right he was!)

Another research project, involving prospective differential evaluation of the impact of improved nutrition, versus improved water supplies, versus improved generalized health services, was carried out in three Guatemalan villages, during the period from 1959-74, in other words practically during the same time period as the Ethiopia D&E project. The work, by N.S. Scrimshaw, et. al., as often happens in instances of “simultaneous” research projects by different investigators, was not known to any of us in Ethiopia; nor was our work known to the group in Guatemala as far as I know, until I visited INCAP [Institute for Nutrition of Central America and Panama] during a U.S. Embassy/Addis, Leader Grant trip with H.E. Ato Abebe Retta, the IEG Minister of Health, in 1962. Consequently, we and INCAP were unwittingly traveling down the same research pathways for about three years and, in effect, I believe, the findings and methodology of each of the projects

increased the significance of the other. In some ways this was also true of the later Danfa and Narrangwhal projects, although the research objectives of the two projects were not as similar nor their timing quite as coterminous.

Haven, just to finish up the discussion of the D&E Project, I think I need to say a word in summary about its results:

First of all, let me assure the readers that I have a complete copy of the published manuscript (see Annex 10). (Available in the collection of annexes.) And, as a consequence, I need say relatively little about such details in the text of this document. However, some rather general but rather important comments to set the context for the more detailed information in the manuscript are offered as follows:

With respect to methods: It is necessary to point out that, as the study progressed from its early days in 1961-63, it became apparent that we had omitted a highly significant aspect of the possible impact of the Gondar program and its assigned graduates, namely the qualitative and quantitative impact on the functioning of the five health centers to which they had been assigned. In order to get the necessary data for such a determination, we realized we would need at least one additional researcher, and that he would have to be very experienced in such matters and at the same time fully acquainted with the conception and operation of the Gondar curriculum.

Through great good fortune, we attracted a person most ideally suited to handle this task, to wit, the second Director of the College (who followed immediately on Dr. Curtis' tour of duty ending in 1958), Dr. Brooks Ryder, the very same “Brooks” who had recruited me for the post I came to occupy at the time! So, very soon, we found ourselves working together on this fabulous project along with all our colleagues on the D&E, Gondar, and WHO staff at the College.

It was obvious that what we now needed was a functional analysis, a wholly new component of the study design which would help us to get some idea of why the health

centers being studied had certain health impacts on the population being served. So Brooks became Field Director of the project, and concentrated on this meticulous analysis of the various aspects of the work of the Health Officer, Community Nurse, and Sanitarian members of the health center staff. This work is all detailed now in Section iv of the attached copy of the published manuscript. (See Annex 10). In the period of time available for observing statistically significant changes in desired parameters of the health center impact, the results were equivocal in all but a few instances. However, the reader should examine the final conclusions and recommendations, and note the team's belief that if these recommendations were to be implemented, many of the problems causing the equivocal results could well be remedied. In this connection, it is important to note that the population served by the system appears to perceive the services rendered as having great value and importance. The advent of the health centers and their well qualified and energetic staff could well form the nucleus for a big improvement in the health conditions in the community served, given the continuing favorable response from the Ministry of Health in terms of strengthening the already much improved organizational development integral with the service system which is clearly in place and following the best principals of public health practice and clinical primary health care.

I really believe that Haven's question about whether we felt there was a great deal to be learned from the work in Ethiopia was a very pertinent one indeed. The answer is a clear and ringing “Yes,” and I think it's safe to say that it was a teaching experience that we couldn't have gotten any other way. It was so important because it was based on the kind of teaching and learning that can only come from practical experience, and cannot be conveyed in a classroom.

Thus, we feel that the recommendations made in the D&E Report more than 30 years ago are still just valid as today as they were then—maybe even more so. And now, they have the added force of having been strengthened by similar findings in many other health delivery systems around the world, including many in “First World” countries. Good examples include the many-faceted struggle in this country to improve the quality of our

health delivery system by broadening its accessibility, vastly improving its administration, and emphasizing the most important fundamentals of public health practice—namely preventive and promotive health measures. Also, I think it's vital that the medical profession and all its colleagues in the paramedical and allied health care professions be imbued fundamentally with their responsibility for benefitting the human condition, in all aspects of their technical expertise!

Other Public Health Programs in Ethiopia

Now, the rest of the program in Ethiopia, I think, confirmed... helped to solidify the belief in my mind and WHO's mind of the importance of two basic ideas: one was the concept of emphasizing, in the developing countries, the absolute requirement for taking the road of decentralized/generalized health services with the emphasis on generalization of the public health program, which means it must include not only public health but curative medicine as well, because you can never offer preventive health programs alone and expect people to use them or accept the idea, because when they are sick they want to be made well, particularly when their children are sick; then, it is absolutely essential to be able to treat them, or at least to be able to offer treatment with a reasonable chance of success. And one of the things we found in the D & E Project was that the most successful component of the mentioned health center services, and the one which set the tone for the subsequent development of that kind of health program, was the reduction in infant mortality which was brought about by the simple means of providing adequate treatment, neonatal, postnatal, pediatrics for children, and follow-up for pregnant mothers. In other words obstetrics, prenatal, natal, and postnatal care, for both the mother and the child, are absolutely essential components of decentralized/generalized health services! Without that you really have no program! So we were able to show quite a noticeable decrease in infant mortality ... almost 19% reduction .. over the three years during which the health center programs were in operation in the three experimental communities. And, due to the prospective nature of our data, the conclusions could be based on life tables - the first, as far as we know, that it was possible to construct in the African diaspora (Tayback,

Matthew, Prince, Julius S. “Infant Mortality and Fertility in Five Towns of Ethiopia,” Ethiopian Med. J. Vol. iv, No. 1, 1965) Annex 14).

Q: Was there resistance to these ideas?

PRINCE: On resistance... it was a strange thing; I never ran across any appreciable opposition to any of the ideas in health service delivery that I proposed in any of the developing countries that I worked in. But where I had the biggest problem was back here in getting money to support them... in the U.S. in terms of the apparent administrative philosophy, strategy of the Agency; it wasn't keyed to the notion, that these expensive and time-consuming and expertise-consuming efforts, were “worth the candle” in terms of “development”! And, from what I have read about the general tendencies of congressional consideration of AID technical assistance programs, it appears to me that the attitude mentioned is only becoming more prevalent, rather than less so. It may be that this simply reflects attitudes in Congress and this, in turn, may reflect a point of view that has been expressed by more than one Congressman in recent times... “You don't have any constituency in the public realm.” Thus, it seems, quite frankly, as far as the “powers that be” are concerned, we do not appear to have reached that “golden door” of “the teachable moment!”

Q: But weren't there medical professionals in these countries who were somewhat resistant to the decentralized/generalized health care?

PRINCE: That brings up another point. You are quite right; there were. And of course some of the British trained west African doctors who objected to the concept of the Gondar health officers getting medical degrees were typical of that group, perhaps; not that British training had anything to do with it; it was just their background, perhaps, the feeling that medicine was the be-all-and-cure-all. But one way at least that I got around that problem, and I did so knowingly (based on experience in Chautauqua County), was to eschew taking for granted the idea that the fact, that I wanted to work with the professional

communities in these countries to develop these newer concepts, was just talk; it was not just talk - it was straight from my heart and from my beliefs in the way things should be done. And the only way you can achieve that collegial relationship, is to convince your colleagues that your judgment is reasonably sound, you know... based on a solid background in academic and experiential preparation, which would give you the authority to make such judgments, was to join the organizations that seemed to be in decision-making positions, and yet were in some opposition to the idea of really emphasizing the preventive medicine and public health component of the decentralized health services. So, in a word, I had to become part of the professional milieu in which I was operating!

Consequently, when I was in Ethiopia I became a member of the Ethiopian Medical Association and I, in fact, was also appointed as the Chair of the Credentials Committee of the Ministry of Health, after I had been in Ethiopia four or five years. In that position, I did everything I could to promote the development of a cadre of highly qualified physicians, not just public health physicians, but physicians in different specialties... but making sure that those sent to do a job in the rural communities were, in fact, well aware of the facts of decentralized/generalized health services and would know and be reasonably comfortable with it. There were difficult times in deciding who to send to rural hospitals, but because everybody was aware of what was going on and had more or less agreed to it, our committee was able to make sound judgements, and these judgements seemed to be in accordance with the Ministry's; and the leadership followed through on them. Thus, the General Medical Advisory Board of Health never once made a change in any of the Credentials Committee decisions. So I think that speaks for itself; and in Ghana, as you know, I and my UCLA medical associates on the UCLA Danfa Project team were members of the Ghana Medical Society. We also published in the Ghana Medical Journal with our Ghanaian colleagues. (See the bibliography in Annex 15—”Summary Report of the Danfa Project.”)

Nine Years in Ethiopia: A Summing Up

Q: How about some summary remarks about the Ethiopian experience.

PRINCE: My conclusions from this extraordinary nine years of experience in Ethiopia were not only very difficult to exaggerate from the professional, medical and scientific point of view, but also from a personal and even emotional prospect. This may have resulted from my association with the Ethiopians in a social way... in as many ways as possible in terms even of where we chose to live - in the middle of an Ethiopian village in the middle of Addis Ababa and not off in any kind of isolated area with people of other nationalities. I wanted to live where the Ethiopians were at home and in this way they came to my house frequently for meetings and for fun... Picnics, lots of hard-hitting tennis, or whatever. What you learn from this kind of experience is a kind of approach... you have to have a feeling for the humanistic sociocultural aspects of what you are doing as well as the technical aspects of it. In fact, it may relate a lot to what concerns me about the present situation, and the way it's been going on for many years now, the reliance to such a degree on contract personnel who may or may not have this kind of experiential background, of being responsible for actually working with the host country nationals on a cooperative basis; and perhaps such personnel may not be as sensitive as they need to be, to the human relations nuances of working, one might say, on a quasi-guest basis in a developing “host” country (where we are the guests and they are our hosts). And I don't think we have, by any means, heard the last of this potential problem!

Q: Do you have any sense of the political scene at that time?

PRINCE: The other thing, of course... yes, I was fully and actually aware of the fact that, for example, there were conflicting elements in the socio-cultural composition of Ethiopia and that the communist influence, at least in Addis Ababa, was very strong in the late '60s and early to middle '70s. And the reason that I was so keenly aware of this was at least partly, because I was under fire during a period of time (in 1966)... actual bullets... not, of course, aimed at me personally but in the whizzing around, my VW [Volkswagon] and me while caught in the area in a cross fire situation between the Germame Neway group (who

were members of the rebelling bodyguard) and the Minister of Defense HQ, just down the street from our little “village.” This “battle” arose because the rebel bodyguard troops were trying to overthrow the Emperor while he was visiting Brazil. They attempted a revolution and all this resulted in a firefight right around my home. The bullets were flying so thick that the leaves were falling off the trees as in the autumn here! Fortunately combatants were using fully automatic weapons and, perhaps, didn't know how to use them too well and they were shooting high or, more charitably, they may have purposely avoided targeting our house. Who knows?! But what they were shooting at was the Ministry of Defense which was just down the street from our house. So we took refuge in the half basement (that's all the house was equipped with); it was kind of an old place and because of that it only had about 3-4 feet of dirt around the perimeter (no masonry whatever.). I took the kids down there and we were relatively safe from the firing that was going on. But Nona (my wife) was not at home when the firing started and I was worried stiff about her. Eventually, “Grace # Dieu [French: Thank God],” everything turned out ok, the firefight simmered down, the revolt was overthrown, and the Emperor came back and made sure the Air Force was on his side. The Bodyguard mutineers had to throw down their arms; they couldn't resist any longer and in due course, that was that, at least while I and my family were in the country!

Q: Did these events and the Emperor's role have any effect on the work you were doing in public health?

PRINCE: I think that the important thing to remember (and it needs constant re-emphasis) is that in this particular case, the head of state, who might have been considered a dictator, was very strongly positively oriented towards what we were doing. And we had his strongest support all along the line. Consequently, his being in power was an advantage from a public health point of view rather than a disadvantage. The people who led the local governments were also pretty much in his camp so that, although the dissident elements were noticeable, particularly the Gallas and Gurages (now, I believe, lumped together as “Oromos”), in the southern part of the country, and, of course, the Danakils,

(the group who didn't want us to work there). It was not, however, a material obstacle to the accomplishment of our task. Having in fact the support of the central government, in the work we were doing, in the Awrajas (districts) and the Meketel Weredas (subdistricts), was on balance an advantage rather than the other way 'round. Of course, if I had been there another two years when the forces which were opposing the Emperor were able to overthrow him completely, I would have had a different story to tell. I had a taste of that in that I was asked to come back to Ethiopia in 1976... but I'll tell you about that later... In short, this experience showed me that it would have been impossible to do any rural health work in the country at that time. And I believe fully that it is axiomatic that this would also be true anywhere else. Thus, we should not, in my opinion, even attempt such work anywhere in the world unless it can be done in a overtly peaceful and secure environment!

Q: Did you have any sense of, or impact on you of U.S. policy towards Ethiopia - not just AID, but the Embassy? Did you have anything of that kind of experience?

PRINCE: That's an excellent question. I was, incidentally, an ex officio (of course) member of the Country Team for quite a period so I was “in” on many of the policy decisions and at least was able to contribute my knowledge of the public health situation in the country to the team's deliberations, insofar as it might relate to U.S. policy development.

Q: Who was the Ambassador at that time?

PRINCE: Ed Korry. He was there towards the end of my tour of duty in Ethiopia.

Q: You were a member of his country team?

PRINCE: Right (as an “observer” only). He was not a career Ambassador but a correspondent with Look magazine or similar publication when he took the job. He had a broad view of the possibilities for AID and Embassy collaboration. I must say that some of the other Ambassadors were not so clearly inclined in that direction. I didn't have any problems with him at all. In fact, we became good friends, but, I must say, I didn't

have much of a connection with the work of the Embassy in previous years. Thus, at the time in question, the relationship was very good and, of course, in any event, we always cooperated with the Embassy whenever we possibly could. Some of the things they asked of the wives of the AID staff, who happened to be in top-level positions of the AID Mission were a bit excessive I thought. But purely from a “logistics”, personal point of view, that had nothing to do with the general experience.

Q: How would you characterize the American/Ethiopian relationships?

PRINCE: I think that the Embassy had a tendency not to recognize the importance of being part of the country, of being familiar with - and going to work with and listening to - people who were not higher up in the country's government administration. In other words, for example, I had a difficult time in getting approval for my house which was not in a place where Americans normally lived in Addis Ababa. Instead it was a in normal Ethiopian village situation... in a house built mostly of mud and wattle. I had to get special permission and the Embassy didn't pay the whole cost up front in the usual manner. Instead, I paid the rental, for which I was fully reimbursed, as well as certain other costs, e.g. propane gas for the stove. And so I had the impression that, for various possibly justifiable reasons, Embassy-community relationships were not quite in touch with the real thinking and feelings of the Ethiopian people.

Q: How would you characterize that thinking and feeling vis-a-vis the United States and the American people?

PRINCE: I think that the Americans with the obvious exception of the, by now, many ex-Peace Corps volunteers, have not had the opportunity to be in touch with people in the developing countries very much and so the average American voter might have difficulty in understanding the things that drove me to do what I and many other of my colleagues and yourself included, tried our best to do! That's why we have to cultivate the “teachable

moment" - so developing country leaders can readily understand what motivated us to come and work with them.

Q: How did the Ethiopians express themselves about Americans?

PRINCE: I think they were like the Thais and the American ambassador - the truly "ugly American" - in the book called The Ugly American (Lederer, William J., Burdick, Eugene, 1958). When Americans read that book they seem to get a totally wrong impression - they think the ugly looking Texan farmer was "the ugly American," and the Ambassador was great. But it's just the other way around. The real "ugly American" in the book was the Ambassador! The guy that was truly well thought of was, in fact, the guy that looked ugly; but in his heart and in his feeling towards the people, and in his understanding of their financial and logistic and cultural problems, he was the guy that made the program work. He was the guy that thought of the idea of the bicycle pump... why not? So a lot of the agricultural people who went over there were true ugly Americans in the good sense of the term. You find them all over the place working with the people in the field trying to help them plant row crops; how to till the field so that it won't erode, etc. You find them all over farming communities in the U.S. as well. It was one of the great attractions to any resident in Jamestown, New York. It was in a farming area and all my neighbors were farmers - and what wonderful people!

Q: You found that the Ethiopians you worked with had a positive view of working with Americans or were they resistant or reserved?

PRINCE: Let me tell you a little allegory, not an allegory actually; but it could be: Two of the communities we were studying in the D and E Project were Maichew and Quorem in Tigre and Wollo provinces respectively. They were located in relatively mountainous country, about 10,000 feet altitude. Both of them, cold as the dickens in the winter time. We were finishing our study in those two communities during the second round, after the health centers had been studied for about two and a half years. And while we were in

Maichew we had these terribly cold nights... water froze in the buckets outside our tents. (We were living in tents then, as we did mostly in the country during the experimental work). The only way you could communicate with Addis Ababa, (with my office) to keep in touch, to find out if anything required my attention was going on or etc., was by phone at night, because there was only a single copper wire, carrying what telephone communication there was between Maichew and Addis Ababa. So I used to go down to the telephone office which happened to be right on the compound where our tents were pitched - so it was easy for us to bring coffee and cocoa down to the telephone operator who was a very kind lady - and we used to sit and talk with her... I and my D & E staff. She was very nice and friendly and had got my calls through, and, as a result, I got my telephone work done with my administrative chief in Addis, Rod Lehman, one of those indispensable people who keeps things running smoothly.

So we finished there in due course and went on down to Quorem two weeks later to do the control community study; and there again the telephone office was in a separate part of the village... nearby the camp but not in it. It was up on a hill and the cold winds from the north came right down and hit that telephone shack going though the cracks in the timber as though through a sieve; and it was bitter cold inside. So I was shivering and the telephone operator got me Addis Ababa and I wanted to get out of there as soon as possible. He said, “Hang on a second; the operator in Maichew wants to talk with you.” Now, a word of explanation - while I was in Maichew I had taken a locum tenens [temporary substitute] for the health officer there, who had to go to Asmara to have his Land Rover repaired. So for a week, I ran the health center for the people of Maichew. I got to meet many of them and I had some pretty sick kids. So I wondered how they got along with my treatment that I had left orders for; it looked as though they were getting along pretty well during the week or two that I was there. Some of them came in for revisits after I left and the children seemed much better, and everybody seemed pleased and happy. So I had a wonderful feeling when I left that health center in Maichew; and that cold night in Quorem when the telephone operator from Maichew came on the line, she

said, “Dr. Prince, how are you?” I said, “I'm cold; how are you? She said, “Well, I haven't got your coffee and I miss you all. But what I really wanted to say is that your patients are doing okay. Their parents also came and told me that if I ever had a chance to talk with you that I should say they are all doing very well now with their little ones and they are so appreciative; “and the whole of them send their love!” Dear God, I thought, I'm not cold anymore!

Q: A very good story and good way to end this part of the interview.

PRINCE: I'd like to back track a little bit to Ethiopia again. I forgot to mention a couple of major items that I left out or at least that I didn't get to last time. One of them was the project of the International Committee on Nutrition and National Defense, which was started in 1956, two years before I got there. It must have been when you were there, Haven.

Q: I think that is right as I have a vague recollection of the study.

ICNND - And Other Nutrition Surveys in Ethiopia, and Results

PRINCE: What you may not recall is that the original purpose of the study was to determine the nutritional status of military personnel in countries in which a substantial Security Support Project was being implemented as part of the U.S. host country Military Assistance Advisory Group (MAAG) AID assisted Security Support. However, when General deGavre, Commanding Officer (CO) of the MAAG in Ethiopia, introduced the topic to the General of the Ethiopian army (General Mered Mengesha), he apparently got a rather negative response. But when General deGavre suggested that perhaps a nutritional study of a country-wide population sample might be appropriate, General Mered agreed and offered much of the needed logistic support.

Anyway those things are important but they are not the real reason I mentioned this study which is of considerable importance not only for what happened in Ethiopia but for

development of nutrition programs in many countries, possibly even outside of Africa. What happened was they did this nutritional study and because the government had been involved in it right from the beginning, they were very interested in it and when Dr. Schaffer suggested that one of the recommendations should be the establishment of a National Nutrition Advisory Board, the government supported this recommendation fully. The result was that we had, I believe, the first interdisciplinary and interdepartmentaNational Nutrition Advisory Board in an African country, connected with the Ministry of Health, the Ministry of Agriculture, and other ministries as appropriate. Moreover, the Board played an important part in the subsequent development of nutrition activities in Ethiopia and provided the coordinating nexus for a carefully designed research and implementation program to deal with nutrition problems in the country.Another significant “spinoff” which may have originated with the Board's establishment, was the part it may have played in focusing the interest of the Swedish International Development Agency on establishment of the Children's Nutrition Unit (CNU) in the Princess Tsehai Hospital in Addis Ababa. Thus, it happened at the time (December 1959) that I was appointed a member of the National Nutrition Advisory Board along with Dr. Edgar Mannheimer, the Swedish professor of pediatrics at the mentioned hospital, and a physician, Professor N.K. Gorbadei, Doctor of Medical Sciences, and Director of the “Soviet Red Cross Hospital” which was established in Addis-Ababa in 1947, following upon a medical mission to Ethiopia on the part of the Russian Red Cross Society, in 1897 and the opening of a small hospital in Addis at the same time and with the same sponsors. (This information comes from a document entitled, “Collection of Research Work of the Soviet Red Cross Hospital in Addis Ababa,” edited by Professor Gorbadei and published by the hospital in 1962 on the 15th anniversary of its entrance into operation.) Consequently, I was able to arrange for the three members of the Board at that time, namely Dr. Gorbadei, Dr. Mannheimer and myself, to sit down together one day (probably around early December 1959) to discuss what we were going to recommend to the Ministry of Health about making something out of the conclusions of the excellent ICNND study.

We agreed that the Board would absolutely need a secretariat if anything was to come of it and the recommendations of the ICNND study. But, in addition, I said to Dr. Mannheimer, “We (AID and MOH) are going to be carrying out an evaluation of the effectiveness of the health centers in the country and the work of the Gondar graduates. But there isn't going to be much emphasis on the nutrition end of the health center work because we haven't the money to do that; it would require additional laboratory work etc. I wonder whether you might be able to obtain some funding from the Swedish Government to handle that end of it.” He said, “Well, I'm going back at Christmas time and I'll see.” So, lo and behold, he returned in a few weeks with authorization by the Swedish Government, for the purpose indicated. Since this happened at about the same time as the beginning of the Children's Nutrition Unit, and a major demonstration and evaluation project on nutritional health improvement in Lekemti [Nek'emte] and several other towns, especially the town which became a major center of the associated research in Wollega Province (Ijaje), it is possible that the Swedish International Development Agency (SIDA) had already decided to carry out a nutritional type of “D&E” Project. In any case, it turned out to be a truly major project with very important results. (Some of the relevant references and a few truncated annexes are included to give some feeling at least for the meticulous work of the Swedish investigators on this project. I can't recall all of the findings. But anyhow I have a lot of the documentation of that study... I think I have it here and I can give it to you, Haven... Here's the one on Teff...”High Content of Iron in Teff and Some Other Crops from Ethiopia as a Result oSoil Contamination,” written by one of the Swedish research team and, “The Antibody Pattern In Representative Groups of Ethiopian Village Children”.. again from the Children's Nutrition Unit Study. “Anthropometric and Biochemical Study in Children from Five Different Regions of Ethiopia”. That was one of the main documents of the study published in the “Journal of Tropical Pediatrics in Environmental Child Health,” September 1972.

Anyhow, that is the first thing that I wanted to mention that I hadn't discussed during the earlier session. The second thing is a generic comment. You know I have been talking as

if I was the one who has been doing all this stuff. Well, of course, that's nonsense. None of this could have happened without my staff without people like Bob Shannon at first and then Rodney Lehman the two administrative assistants who served on my staff seriatim, Elizabeth Hilborn, the top notch Public Health Nurse, who, had come to us following a long (4 year) ICA posting in Amman, Jordan. I was tipped off in Washington about her availability—a lucky break for me and Ethiopia! Guy Trimble the hospital architect, Joe Hackett the distinguished Pharmacist and Senior PHS Officer Don Johnson the health educator “par excellence” - and the equally experienced Walker Williams. It's hard to mention them all. But I had 25 professional people on my staff by the time I had been there a couple of years and these were all “in situ” in Addis Ababa, Gondar, and elsewhere in Wollo Tigre and Begemedir Provinces and on the D&E Project research team, the Malaria Eradication Project team, etc. - a truly fantastic group of American professionals!

Q: Were they all government employees?

PRINCE: No, although the great majority were, assuming you include the nearly 30% of my staff who were employees on PASA (Participating Agency Service Agreement) employees from the U.S. Public Health Service.

They, of course, pitched in and worked like Trojans the whole time they were there. None of this could have happened without them. And I have mentioned publicly at an NCIH [National Council on International Health] conference a couple of years ago when I received an award there for “Service in International Health”... that I owed this honor to the people of the countries that I had been working in... which was, of course, absolutely true, as well as true of all the people on my staff and in the Missions and back here in Washington. You know, I must also never forget that Clayton Curtis was the “spark plug” who played a major part in getting things started for me, once Cliff Pease had gotten me on board, and he helped everywhere along the way. So this is not an account of one person's experience but an account of what happened as a result of what I consider to have been a very constructive and positive effort on the part of AID and associated

organizations and agencies, in trying to improve the level of health and the quality of life of people in African countries.

Q: What about the Ethiopian professionals you worked with? Were there any?

PRINCE: Of course. Remember I told you that the Minister didn't wish to accept my nomination by the Mission without getting the approval of my vitae. And this was necessary because the Ethiopian Medical Association and, particularly, the Medical Advisory Board of Health insisted that they have that information. So when they received it ...and apparently found everything therein compatible with the responsibilities of the technical professional nature required, my approval from the Ministry of Health was immediately forthcoming - end of problem!

Q: This Medical Advisory Board was all Ethiopian staff?

PRINCE: No, it wasn't. Dr. Friede B. Hylander a Swedish Medical specialist in the control of tropical diseases, was the chairman of the Board and most of the members were physicians from other countries, (mostly European) working in hospitals in Addis, or other parts of the Ministry of Health, such as the Anti-Epidemic Service.

Q: Where did the Ethiopians get their medical training?

PRINCE: At that time.. none of them in the country, of course, quite a few of them from Beirut; the American University of Beirut (a USAID-assisted university) medical school (This Medical School, although located mostly in Beirut, has a major administrative office in New York City and received its charter from the Board of Regents of the NY State Board of Education some 30 or more years ago. Its graduates, on successfully passing NY State Medical Licensure exams, are then able to practice in NY State and virtually, I presume, anywhere else in the world, once they pay the required licensing fees.). Quite a few from England and, at that time, I don't think any of them had been trained in the United States. I think, the first physician (I am almost sure) in Ethiopia was trained in India. However,

altogether I was told, medical and related staff in Ethiopia came from 22 different countries and had in many cases been trained in the first instance in their own countries before coming to Ethiopia .

Q: How did you find their receptivity to public health concepts?

PRINCE: It is a very good question. I had a lot of support from the American and other missionary doctors who were also in many instances strongly public health oriented, and I, myself, became a member of the Ethiopian Medical Association (EMA) right away. I thought it was essential for me to be a part of this group and I went to all their meetings. We had lots of talks about this business of decentralized/generalized health services because this was long, long before the idea of primary health care which was almost twenty years down the pike (1978). We had some differences of opinion, I guess, but mostly the other EMA members were quite in agreement with the view that prevention had to be combined with curative services if we were going to solve any of the health problems of the country.

Q: What was their attitude about paramedics as opposed to fully qualified doctors?

PRINCE: That is always a problem. Remember I ran into it at the UNCAST meeting in Geneva in 1963 as well. But I also encountered it in Ethiopia; for it is true that, in those days, the medical profession had a more limited view, than many doctors do now, about the capabilities of paramedical physicians' assistants, technicians, public health workers, etc...

Q: Among the Ethiopian doctors?

PRINCE: Yes, even among the Ethiopian doctors. That attitude had to be overcome but, you know, they “came rather quietly,” after the first Gondar health officers became doctors because “the Gondar group” proved so well qualified and knew so much about the logistics, administration, planning and clinical and public health generalized health

services, aspects of and, particularly, how to handle emergencies in remote locations, a problem common in the Ethiopian diaspora! Not known as “The Land of Cush” for nothing!

Q: They became doctors or full medical officers?

PRINCE: Doctors, yes. That was the big argument, “you mustn't give health officers a chance to become doctors because then they will leave their health officer posts.” However, we had anticipated that possibility and therefore included the proviso that health officers applying for full medical qualifications had to work four years in the field before they could even apply for medical school matriculation - so this could have served as an automatic restraint to minimize the likelihood of any wholesale “flight” of health officers from their rural assignments.

As it turned out, however, many of them wanted to go back and work in rural areas when they completed their medical training anyway and liked the idea of being Provincial Medical Officers of Health. It was done in a way that gave them considerable status; and they had a chance to work with the local government organizations at a very high level. It was a good way to handle the need, at the time. But, I know very little about what happened afterwards. Thus, I can't tell how sustainable this dedication to the ideal was, in the face of adversity... the Lord only knows...although we know that it did stay in place in Ghana through the upsets there; but the upsets that occurred in Ghana were nothing, I gather, compared to what happened in Ethiopia!

Q: Well is there anything else on Ethiopia?

PRINCE: No we are finished with Ethiopia., i.e. “finished” in quotes. I'll never be “finished” with Ethiopia any more than I could be “finished” with New York State! It's in my heart, my mind, and my thoughts forever, I guess. But I need for Ethiopians and you to know how my experience in Ethiopia, I believe, proved so useful in the many assignments I carried out on a TDY basis in other countries while still posted in Ethiopia.

Temporary Duty (TDY) Activities in Other Countries, While Still Posted to Ethiopia

These assignments had to do with attendance at conferences, meetings, etc. (many under international agency auspices, such as UNDP [United Nations Development Program], UNFPA [United Nations Fund for Population Affairs], UNRISD, WHO, ECA, UNICEF, OECD [Organization for Economic Cooperation and Development], DAC, and private voluntary agencies - Volags, such as IPPF, Pathfinder, etc, and other bilateral government organizations, e.g.: the ODA (UK), SIDA (Sweden), FAC (France), GTZ (German), US agencies other than USAID, such as the USPHS, and many others.) I also had the privilege of being visiting lecturer at several universities in the developing countries, such as AUB [American University of Beirut], University of Ghana, and Ibadan University in Nigeria.

I will discuss these matters separately as appropriate and begin right now with mention and a description of some of the TDYs that I was requested to handle while I was still posted in Ethiopia. You may recall that President Johnson signed an amendment to the foreign aid authorization and appropriation bills in 1965 which altered completely the attitude of the United States government toward technical assistance to population programs in developing countries. This was one of the most important events of this type that have occurred, I would say, in the whole history of the foreign aid appropriation legislation. What the President did at that time was to agree that U.S. foreign aid funds could be used to assist countries with the planning and implementation of family planning and related programs (including, to an extent to be determined on a case by case basis, assistance with establishment of maternal and child health projects necessary for the successful implementation of family planning efforts). This was an extraordinarily “advancive” step on the part of the U.S. government (at least in my opinion) and resulted in most extraordinary and extensive involvement of the U.S. foreign aid program in all types of population related activities in developing countries in the years that followed.

As a result of the above turn of events, quite a few of the “extra curricular” activities that I undertook on AID/W orders, were in connection with the beginning efforts, of the Agency in general and the Africa Bureau in particular, to attempt to comply with the requests of a number of African countries which saw a chance to implement a program of the type which had never before been possible, at least from a AID collaborative program point of view.

Compliance with these requests, on my part, was nearly always in the form of TDYs. I will try and deal with these assignments chronologically. Consequently, the earlier episodes of duty performed while I was outside Ethiopia were almost certain not to involve Public Health College graduates, whereas a number of the latter were assigned to work as members of the ICNND team. More detailed listing and appropriate acknowledgments of the service rendered by the very large number of Ethiopians involved in this important study are included in the ICNND report. (Annex 16).

Although this may sound rather routine today, it should be remembered that, almost 40 years ago, this was a most remarkably pioneering effort considering the relatively primitive methodologies available for biochemical investigation of nutritional status in a population, and in the age of McBee cards, manual processing of data and their analysis - in other words, during the “era before the computer!” Consequently, when one reads in the ICNND report of this research, that the observed indicators of Vitamin A in children throughout the country was only of a moderate degree and when one reads of the very much more recent findings of Sommers, et. al., in Indonesia and other developing countries, one is impressed with the understatement of the problem implied in the use of the word “moderate.” For now it becomes apparent that such deficiencies in many micronutrients are not, in reality, “moderate” at all but of far reaching significance to the welfare and longevity of the individuals concerned (Sommer, A., Tarwotjo, I., et al, “Increased Mortality in Children with Mild Vitamin A Deficiency” Lancet, 1983; 2:585-8)., (Hussey, Gregory D., M.B., M.Sc.,”A randomized Controlled Trial of Vitamin A in Children with Severe Measles,” NEMJ July 19, 1990), (Bjornestjo, K.V., Mekonnen, Belew, Zaar, B., “Biochemical Study

of Advanced Protein Malnutrition in Ethiopia", The Scandinavian Journal of Clinical and Laboratory Investigation. 1966. Vol.18, No.6-Report from the Ethio-Swedish Children's Nutrition Unit, Addis Ababa, Ethiopia), (Mellbin, Tore and Vahlquist, bo, "The Antibody Pattern in Representative Groups of Ethiopian Village Children" Acta. Paediat. Scand. 57:385-394, 1968). Finally, concerning this Vitamin A nutritional status problem, one needs to be aware, in interpreting the data from this study, that, when it was carried out, probably very few people had even heard of or even conceived of the idea of the question of the availability for metabolic requirements in the human body of the various micronutrients that are required everyday when the intake of these micronutrients may be episodic. In other words the body has some kind of a leveling off mechanism for handling this kind of problem. In the case of Vitamin A in which such "ever normal granary" processes are of the utmost importance, it is now possible to measure this capability in the given individual through a test entitled "relative dose response (RDR)." This depends on the fact that Vitamin A is stored in the liver and in the case of a relatively decent intake of this micronutrient the level of storage of the Vitamin A in the liver is of such an extent that when there is an inadequate intake of fresh Vitamin A on a regular basis, the liver pumps out whatever is necessary to keep the ever normal level going on in the blood whereas the intake may be extremely irregular. Actually, if this is carried too far, the level of storage in the liver goes down to the point where it can no longer fulfill the need to keep things "normal" for the rest of the body. Similarly, the end result of the lack of Vitamin A in the metabolism of tissue that is particularly effected in the human case, namely the conjunctiva of the eye, is called the "conjunctival impression cytology test" whereby a scraping of the conjunctivae, very gently of course, with a sterile swab and depositing this on a glass slide which is then examined after treatment and staining under a microscope, shows the state of the epithelium of the conjunctiva. If there was a deficiency of Vitamin A in that particular patient, the tissue has a characteristically abnormal appearance which can be detected by a microscopic examination of the specimen. As I say, none of these methods were available at the time the study was carried out, so there is quite a bit of discussion in the excellent report of the analysis of the data concerning this problem,

not realizing that the problem was fundamentally due to the lack of sufficiently sensitive biochemical methods to determine the degree of the deficiency.

The lack of iron deficiency in the children within the sample studied in this particular case is discussed at some length, and the correct conclusion was reached, using methods actually available at the time because they were mostly observational and certainly did not require any advanced biochemical determinations. This conclusion was that the high iron content of teff, the grain normally consumed by almost the entire Ethiopian population, was caused primarily by the iron deposited on the surface of the grain which is not removed by threshing and which comes from “iron contamination” from the soil in which the grain is grown. This happens to be due to of the particular nature of the soil in Ethiopia which has an unusually high iron content - a fact which I think was thought to be related, perhaps, to the volcanic nature of the terrain. This fact was later substantiated by several of the Swedish researchers, working with the Ethio-Swedish Childrens' Nutrition Unit in Ethiopia, but in which the actual chemistry and analytic work was done at this unit's “home base” at the University of Uppsala in Sweden.

Q: Nine years in Ethiopia was it?

PRINCE: Yes indeed, and the time really flew, I suppose to a major extent because I was so busy during the entire period, starting with the conclusion of my public health assignment in New York State and running right through to the completion of my posting in Ethiopia and, as events subsequently proved, pretty much right up to the present!

Beginnings of AID Population Programs in Africa

PRINCE: Yes, right. I was far from finished because I went back to Washington as a result of an urgent cable from Bob Smith who was AFR (Africa Bureau) Assistant Administrator asking the mission to get me there ASAP [as soon as possible]. I was quartered with Clayton Curtis in his office on 19th street and Pennsylvania Avenue for a few months. We had some talks together when I got back. And I told Clayton, you know, I attended

this population conference in Kampala just before I left Ethiopia. That convinced me that I had to undertake an immediate sanitary survey in Africa - if anybody needed convincing (because a health officer, when he takes on a new job, always does a “sanitary survey”). Of course, this wasn't a “sanitary survey” but a “population program survey” that I thought was essential for me in order to have a grasp of what the problems were and how the African nations were looking into the situation. Because I thought it would be wrong and even perhaps counterproductive for AID to undertake to try to carry out a program of this kind in African countries (And I knew about the sensitivities, on the issues in Ethiopia first hand) without first having a close look at attitudes, opinions, and possible approaches to the population problem. So I was back in Ethiopia within a few months of the time I had left there, as part of this study. The trip didn't begin in Ethiopia; it began in Senegal and then we went to Liberia, Sierra Leone, Ghana, Nigeria, Ethiopia, finishing in Tunisia anMorocco.

Q: This was on population programs?

PRINCE: Absolutely.

Q: What year was this?

PRINCE: The same year I got back .. 1967. I didn't wait for 1968; I went right away within a month to six weeks of my return. I went back to Africa with this particular objective and I was able to get to go with me, Waller Wynne, an excellent demographer from the U.S. Bureau of the Census, and Jean Pinder, a public health nurse who was very active in AID at that time. (Her husband was Mission Director in Ghana.) and Harriet Parsons, now Harriet Destler, who was just being “broken in” to the population field in those days. She was an excellent administrator and programmer and travel companion as were Jean and Waller. The four of us went off, as I said, within a month or so of my return and we visited those countries and wrote a report in which we pointed out that there is no way we felt that we could recommend to the Agency that it undertake “pure” population programs in any country in Africa unless we also provided assistance in other substantive areas in that

country, and particularly, in maternal and child health and thus a chance to integrate family planning activities in the maternal and child health programs. Of course, there were some second thoughts about that back here, particularly in the Office of Population. (It wasn't called the Office of Population in those days, but I can't remember what it was.) But later on it was the Office of Population and, frankly, that office had qualms about integrated MCH/FP [maternal child health/family planning] programs, at least during the early days of the new program.

Q: Were there any population programs in Africa at that time?

PRINCE: The Population Council had engaged in several. They had a program going in Kenya. (The Kenya family planning document was written with their help.) And likewise the family planning progress and development document in Ghana was also written with the help of the Population Council and with the Ford Foundation which was very active in this area. And of course IPPF was already involved in helping to establish family planning clinics in many countries. And the Pathfinder Fund was involved in Ethiopia before anybody else was in the population field. Edna McKinnon represented that organization on a couple of occasions when I was still there. And I remember thinking that this was a very charming lady but she is going to have second thoughts about this before she is here very long. And she did indeed! However, she stuck to it and helped in the organization of a Family Guidance Council which was then the only “spark plug” for family planning activities in the country. Of course, the Press was quite strongly opposed to it—and that all had to be changed—and change gradually came about. And you know in due course, I think there have been major changes in attitudes and opinions about family planning in Ethiopia, although it may have been one of the hardest countries to work in from that point of view, in the early days of the “movement.”

Q: You are now in Washington and your major role is ?

PRINCE: Yes, the story now is about my experience in Washington right after my return from Ethiopia. My major portfolio was population and family planning. Then the next thing, I said to myself was that I had to have representation on the spot in Africa. “It makes no sense to try to run this show from here.” I'm sure you've heard of the Africa Regional Population Office; that was my idea. It got through the Agency and we did set one up in 1970 with Ernie Neal as Director . He had been in the Philippines as the Mission Director and he had been brought back to Washington on complement at the end of his tour of duty there. So we managed to “snare” him for the job of Director of the Regional Population Office. It was located in Lagos. That was the second thing that had to be done.

Black College Participation in Family Planning and Health Programs

And then a whole bunch of ideas began to circulate around, between Clayton Curtis and Jean Pinder and Bob Rupard and myself. I guess you could start with the idea that passed back and forth between Bob Rupard and Jean Pinder and I. Bob was the Director of the AFR Office of Technical and Institutional Development to which the health and population operations were attached. One day he called Jean and me and said, “Bud and Jean, I want you to think of some new ideas.. some new things we can do in the office that we haven't done so far. I said, “you mean in health?” “Yes in health and whatever.” “I just want some new ideas.” I went back to the office with Jean.. it suddenly occurred to me. “We've been spending all our time and effort with underprivileged, less financially well-off organizations in Africa, to develop health services programs and related activities; why don't we think about doing something with the related organizations in this country?” “She said, “what do you mean?” I said, “you know about the black colleges in the U.S.; they are always looking around for money and don't have easy access to funds to develop programs; and certainly not for overseas work. And yet they would be, could be, highly qualified in this area if we could give them some assistance.” Jean thought this was a whale of an idea. So we talked to Bob again and he said, “Okay, why don't you and Jean

make a trip around to these institutions and see if you can find some strengths in them that we can build on with some kind of assistance from here?" This was in the spring of 1968.

When Jean went to Tuskegee and Meharry and a couple of other places. (I don't recall all of them) Jean said Tuskegee doesn't have much capability in health and population; I don't think they would be much to work with at this stage of the game. But Meharry could be another story; they have a good medical college and they are interested she said. They are especially interested in developing capability in working in Africa, even to the point of setting up programs to learn French for some of their doctors and nurses so that they can work in francophone African countries. She said, "I told them that in a lot of countries in Africa they do not speak English even in professional circles, so you have to be able to speak French. So we went to Bob with this idea and he said, "Okay, this is very interesting I had never thought of that. But we have a mechanism called a "211(d) grant" that we can use to build up the strength of institutions in this country to work overseas and in general to strengthen their capabilities to do a better job as institutions of higher education. So why don't you draw something up with the people there and we'll see if we can get it funded. So we began going to Meharry and I must say the first two times I went there I had a quite ambivalent feeling about whether they wanted AID poking its nose into their affairs. A funny part about it was that one of the physicians who seemed to think twice about getting mixed up in French language training programs, was later on, the strongest supporter for the whole thing. Anyhow, one way or another, we got the 211(d) grant in place and the idea was for Meharry to establish a Maternal Child Health Family Planning Training and Research Center in Nashville, staff it, and learn about population programs and how they can be integrated in maternal and child health programs here; and then try it out later in developing countries elsewhere, presumably in Africa. Sure enough they did a good job of getting an excellent staff, not necessarily African-American, a mixed staff a very good staff including people like Dave Dunlop the economist. I think that this was his first entry into international health work. Dave was very active on that faculty. They had a top notch "thing" going. After a while, by 1971/72, it became important for them to establish a outlet

for their well trained faculty and interest in working in Africa. They obtained an institutional development grant to work in Botswana. And that's how our program in Botswana got started. It all began with Meharry!

Q: This was population, family planning?

PRINCE: Right, precisely. They went out there and the program had to do with training of midwives and maternal child health aides. They set up such a good program with the Mission and the Government of Botswana that we now know that it has continued all those years and is still going strong. The reason we know this is that, interestingly enough, Tennessee State University became interested in doing some research in finding out what happened to that program. So they put in a proposal under the Historically Black Colleges and Universities Research Group Program [HBCU/RGP] to carry out a sample survey (social science survey research program) to determine the long range impact of the Meharry program on the training of, and services offered by, the maternal child health aides and midwives. It was surprisingly successful. The only thing.. it is very interesting and proven to be true of all the programs that we have in this area... the only thing that was missed and it was not the fault of the Botswanas, it never got into their curriculum. For some reason or other. I think we were responsible as much as any one. Never gave much thought to it. Prenatal and obstetrical care ...maternal and child health services subsequent to the neonatal period were very well looked after. But little was done about longer term postnatal care and I don't know why. I've never been able to figure it out.

Q: You mean the medical training?

PRINCE: Yes. So the programs had no postnatal care connected with them. When the child was born that was the end of it until the child was then brought into the pediatric clinic some 5-6 months later. But in the interim all kinds of things happened. Because that is a very bad time for the children; so the health services were missing an excellent opportunity to reduce infant mortality because they had no postnatal care part of the program. It wasn't

the fault of the nurses at all. I think basically it was my fault for not thinking of it. I mention it because it is an accurate picture of what happened in the end - some 15 years down the pike! This all “came out in the wash” when Gary Lynn and his colleagues at the University of Tennessee State University published a report on the work they had done under the HBCU/RGP; and I hope that this has had a salutary effect, on other programs around Africa, that said - “don't forget postnatal care.”

Q: What other initiatives were you involved in?

PRINCE: Then it became obvious to me after all of us had attended a command performance retreat at the Belmont conference center (AID funded) about March, 1970, that we had to legitimate these things we were thinking about - Jean and I and Clayton and Bob and, especially, I must add, Ernie Neal, who by then was the Director of the AFR Regional Population Office in Lagos and came to AID/W about April, 1970 to help in drafting the concept paper upon which the airgram was eventually based. By that time Art Howard was the program officer in the Office of Institutional Development. I went to him and said, “Art, you know, I think it is time for us to get a circular airgram to all Africa Missions to tell them what we see as necessary for this population program in Africa; and to encompass in it the importance of the integration of maternal and child health programs, the sensitivity to local country interests and concerns about it; the sociocultural aspects - the social science aspects of what we are doing - not to leave these out but specifically to mention them as considerations that have to be looked at whenever anything of this kind is being prepared.

By that time, incidentally, Jean and I had put our heads together and had come up with a couple of other ideas to add into this, as possibly centrally funded projects.

On June 30, 1970, I finally got this airgram out and it had the easy number to remember “CA-1491!” It is entitled: “Population Programs in Africa” and refers to a whole bunch - six previous - circular airgrams and it went to Ambassadors and USAID Directors, from

Newsom (Assistant Secretary of State for Africa) and Adams (AID Assistant Administrator for Africa). So, right from the top, with my signature in the left hand corner along with Art Howard's, it starts out by saying: “This message describes a series of new approaches which are intended to provide more flexibility in assisting population/family planning activities in Africa, particularly in countries in which AID does not have bilateral programs as described, in section 2 below.” The initial section contained the general statement of our present approach to population/family planning activities in Africa. Then there was an overview and a lot of detail. This is almost illegible because the printing is so worn down. It is mimeographed but I have another copy which is better and I'll give that to you to put in the record, if you wish (Annex 17).

Q: What was the basic philosophy behind that program or basic strategy?

PRINCE: The basic strategy was to address the African countries and ask them how they felt they should approach the problem. And to emphasize to them the feeling that we did not want to recommend population programs in their countries unless they felt they understood why it was important and agreed with us that it was important. And also we understood that it might be very difficult for them to try to sell something that looked like population control per se, without also bringing with it the promise of better survival of their children. Because, to ask people to cut down on the number of births in the family when they knew the infant mortality (during the first year of life) was close to 25% and the childhood mortality rate (for 0-5 years of age) was close to fifty percent, did not make very good sense! We agreed that we would be very flexible...in fact, flexibility was the name of the game, based on local sensibilities. Even so, it took close to six months to get this airgram cleared!

Q: What were the main activities that you were planning to support?

PRINCE: These were the things that Jean and I talked about. We primarily said that the Mission should proceed with bilateral programming the way they had with other programs

but bearing in mind the sensibilities and to recognize that AID was, in fact, supportive of this approach, and was willing, in appropriate cases, to fund maternal/child health (MCH) projects which included family planning (FP) as an integrated component, provided this component was of significant importance. In other words, they couldn't just do a health program per se without any FP and expect to fund it under Title 10 (the Population/FP part of the Foreign Assistance Act). One of the problems was that, in those days, we had very little health money, and certainly by 1965 we had a big reduction in health money in Africa. There had to be a lot more concentration on regional projects, and non-health projects, as a means of getting money to pay for health activities. We felt that it was a legitimate idea to establish a health project with Title 10 money as long as it had an integrated population component because the two were supplementary. In fact, you cannot have a decent health, especially MCH, program, in the presence of uncontrolled fertility - the latter is absolutely counter to the other! We were able to “sell” this idea, I think, pretty much, to AID/Washington, after a great deal of difficulty; and also it struck a common chord in Africa. I'll tell you a little more about how this idea was implemented as we go along.

“The new Regional project: Several new population projects described below were included in FY 1971 programs. These broadened the concept of Regional projects as outlined in CA-1491. All countries eligible for AID assistance were to be considered for participation in these programs. Some of them, described below, represent modifications of previous programs expressed in various messages.”(following, temporarily, the transmission of CA-1491) The first one was called Maternal and Child Health Extension. I don't know whether you have ever heard of that program. It was designed to extend MCH into family planning and also into more of the generalized health services in the country. On a regional basis we could work in countries that didn't have bilateral programs, that weren't “concentration countries.”

Among the forty countries in which we were permitted to fund bilateral programs in the world, we were allotted funds for only ten in Africa. But we wanted to work in other than those countries in a good many cases; certainly in West Africa you had to, because there

were very few “concentration countries” there, e.g., Nigeria, Ghana, Liberia; I guess that was about it. So by using the regional funding mechanism we were able to work in places like Cameroon, Sierre Leone, Senegal, etc. One such project was called “Maternal and Child Health Extension” and it was put on a contract basis with two different organizations: one was the University of California, San Jose, and the other was the Organization for Rehabilitation and Training (ORT) in Geneva, which also had an office in New York and was qualified as an American organization (we could only contract with American organizations). The idea was to set up these MCH Extension projects in several of the West African countries, e.g., Niger, Nigeria, Benin and Zaire. ORT did the ones in Niger and Zaire. ORT was an Israeli funded organization primarily, but very interested in getting international work; and they had some very highly qualified people available. They were given the job and they did an excellent job of it. The one in Zaire was of particular interest to me because it embodied a concept that nobody ever thought of before. It was limited to Kinshasa. The problem was the Mama Yemo Hospital. Have you ever been there?

Q: No, but I have heard about it.

PRINCE: It is a huge hospital and they were experiencing up to 200 obstetrical deliveries a day. Can you imagine that? 200 deliveries a day in the hospital? Ninety-five percent of them had no business being in a hospital. But there was no other place to get obstetrical service. So we decided to suggest to ORT that they place a “cordon sanitaire” of maternity centers around the hospital - a mile or so away to catch the people going to MamaYemo and give them good obstetrics and follow up... the whole business: prenatal, natal, and initial postnatal care as well. They did that and it was a huge success; but I don't know what happened later on when things began to go to pot in Zaire. I presume it is like everything else there; it's probably gone down the drain. But I know that there were some Canadian Jesuit doctors working in the MamaYemo Hospital in the obstetrics department who were tearing their hair out by the roots because the patients were lined up in the wards and in the hallways (not even in the wards) because there was no room for them in the proper places; their “beds” were mattresses on the floor! The whole thing

was a “cockpit;” you know, like the “cockpit” in the intensive care unit in the hospital in Kumasi in Ghana; you know wartime conditions in a supposedly peaceful environment! Of course, there was all kinds of yelling and shouting going on by people in trouble, medically speaking. Well, they had apparently done away with that completely and put in a whole new public health program in Kinshasa, as well, which had a major effect on infant and child mortality.

Q: What was the general reception among the African countries to family planning?

PRINCE: Oh, this approach was generally very acceptable and when ever anybody tried to go against the grain they had a pretty rough time of it, including Ray Ravenholt (Chief of the Office of Population in AID/Washington). About 1971, Jean and I thought up a project for Tanzania. Now in those days Tanzania was not very prone to family planning because they had in mind these Ujamaa villages and everybody was going to be farming like mad to grow the food necessary to feed the country and they didn't think they needed much family planning. So the only thing going on there was under the leadership of a nongovernmental organization (NGO), the Family Planning Council and Training Center. (I can't remember the exact name.) We decided to geAID to assist IPPF to fund this project for the Family Guidance Council. And there again they had a huge hospital in Dar Es Salaam which had the same trouble as the one in Kinshasa. But instead of a circular ring of maternity centers, we decided to address the problem of training the Tanzanians needed to operate such centers, in other words maternal and child health aides. But because the government didn't want any kind of family planning program, we had to get approval to greatly expand the influence and activities of the Family Guidance Council. In due course we obtained that permission; but we still had to get the formal Family Guidance Council to agree to it. They did, and Jean and I went there.

On one of the visits which I made later on myself, I mistakenly I guess, took Ray Ravenholt along. Well talk about a bull in a china shop. He got there and we had a meeting in the Minister of Health's office the next day. I was there with the AID Program Officer. Ray

came in sat down at this long table like our conference table in here. And the Minister was sitting up at one end and Ray was two-thirds down at this end. He picked up his portfolio and took out some charts showing the reduction in fertility rates in Indonesia, Thailand, South Korea, Malaysia and so forth. He said, “Excellency, this is what you can do if you really distribute contraceptives. All the women want is the means to provide contraception and the information about how to do it. So what you need to do is hand these out en masse, all over the country.” And he reaches in his bag and picks a fist full of condoms and shoots them, like a beer on a bar table, down to the Minister! We had scheduled a visit to a Ujamaa village that afternoon but the Program Officer and I put our heads together and said we've got to stop that. If he gets into one of these villages, we'll all get thrown out of the country. We invented “mechanical problems” with the airplane and arranged a different and less sensitive visit to a District Hospital a few hours drive from Dar Es Salaam.

Q: What was the Minister's reaction?

PRINCE: Oh, he was absolutely infuriated and astonished; he didn't walk out of the room but he sure looked like he was ready to. I didn't know what to do; I really didn't!

Q: Did you get a program in Tanzania?

PRINCE: We got a program. Ray went home and we rewrote the whole thing and got the Minister and everybody to sign off on it with proper introduction of the subject in the way we wanted it to be as an integrated health program with a family planning component. And with the training necessary to provide people decent child and maternal health care in the Ujamaa villages, because without that the infant mortality rates would remain sky high. And we said there is no reason for that. If you have a good maternal and child health program in an Ujamaa village you can reduce your infant mortality by 50% in four or five years. We'll provide the training for the people to do the work and give you a lot of the

equipment and supplies you need to start with and help you build small MCH centers in locations which can serve a number of villages.

Q: Did they accept the family planning component?

PRINCE: No problem, none whatever. It went ahead and again it was a moderately successful program. The people who did the CDIE [Center for Development Information and Evaluation]-sponsored survey of the sustainability of the program took note of this fact. You'll notice it was specifically mentioned in the report, in effect that “the maternal and child health training program has been a great success; these people are still doing what they were trained to do and the centers are still doing what they were supposed to do.”

Turning to the Tunisian Population Program

Q: I had the impression that there was a great deal of resistance to population programs in Africa, particularly official opposition?

PRINCE: Well sure there was. You couldn't get people to agree on a population policy. It all depends on how you looked at it. If you insisted that they have a “full population policy” or a “White Paper,” dealing with it specifically by coming out and saying, “it is our objective to control the size of the population in this vast country or something like that, it was “no go.” Or if it was run in such a way as to appear to be put upon them rather than internally developed. Tunisia was a beautiful example. Do you know what happened in Tunis?

Q: No.

PRINCE: Well (and I was in on this at the beginning and had an opportunity to help to stop it and correct it), they had gotten off with the idea that family planning had to be done in terms of female sterilization primarily and/or intrauterine devices (IUDs).

Q: They.. being the Tunisians or who?

PRINCE: The Tunisians. It was the medical profession there that had that idea. “Scoopy-dos” as they used to call them; tying off the Fallopian tubes. This was a startling discovery to me; that their own medical profession was responsible for such an idea. Anyhow their attitude came pretty close to abortion obstetrics; and gynecology specialists apparently had few qualms about even that. But this was not abortion; it was female sterilization. They had mobile units; they didn't have a fixed unit or a series of health centers or anything like that out of which to operate. They had small clinics (each staffed by one or two dressers) in many villages around Tunisia which you would have noticed if you have been there. But they didn't have any kind of public health, other than immediate emergency health care. The doctors said we will have these mobile units with ob/gyn [obstetrican/gynecologist] specialists in them to travel around the country and provide these IUDs or female sterilizations. They got the women's clubs together and sold them on the idea and then the women's clubs almost coerced the women in some of these villages to participate in the program. Well, I guess it was in the early '70s, I went to Tunisia and had a look at the situation because by then Bourguiba was beginning to get into trouble from this program; there was such a backlash to it and nobody knew why. I will never forget the first place I went where there was one of these mobile units. I walked into the clinic and here was this depressed, sad looking female Russian gynecologist sitting in her clinic, with not a patient in sight! I inquired around and it seemed that the people were not going there because they had been told by the women's clubs that they had to go. (I was told that they had to go to these clinics to at least have an IUD put in.)

So they were in almost open revolt. On top of that a few of them had gone to the IUD clinic; you know in the beginning the women's club had told them they had to go; so “we ought to.” And the ob/gyn lady MDs, bless their hearts, put in the IUD with no explanation, no nothing (quite possibly because they spoke only Russian!), no counseling or anything to the women about what to expect. Then they went off; they had a schedule of when they were going to visit there again with the mobile units but it was very inaccurate. They sometimes came and sometimes didn't. You can imagine what happened when the

women started to bleed. In a Muslim society a bleeding woman; oh boy, so of course that had the potential of causing terrible complications with their husbands. Consequently they just rose up in arms and refused to go. So this all had to be “taken down” and the authorities in the country had to begin to use the concept of developing decentralized health facilities staffed by qualified people, not by a doctor who knows nothing about the sociocultural aspects of the subject, but instead by qualified people who were Tunisians not Russians or other foreign gynecologists. So we had to help them train the necessary maternal child health aides again and nurses and midwives.

Q: You got the government and the Tunisian doctors to agree with a different program?

PRINCE: Yes. But an early glitch in that whole thing was, unintentionally of course, abetted by the World Bank. This was their “first” health program. They came to me (among others, I suppose) and said we'd like your advice on this idea we have for Tunisia. So I went over there, on 19th and Pennsylvania or something like that... My office was here in this same building practically. When I walked in, there were a couple of Indian doctors and one French doctor. They said here's what we are planning to do, (they had a architect, too, and brought out this rendering of a very fine, fancy-looking maternity center) I said what's this; they said this is a maternity center. But I said this looks awfully big to me. “Well, of course it is a hundred bed maternity center.” I said, “What are you going to do with a hundred bed maternity center?” “Well, we're going to have the women come and give them really expert maternity lying-in services and all that prenatal, postnatal, the works.” I said but how many... what percentage of the population do you think are going to be able to do that?” “And where is the money coming from?” “Oh, we're going to pay for the whole thing.” The next thing I heard... I said, “you know you are playing into the hands of the Tunisian ob/gyns; they want to have a nice hospital where they can bring their patients and then charge them and pull in a good fee for it. But the number of patients they see will be minuscule compared to the number who need it, both from a medical and family planning point of view. I think this is just the wrong thing to do.” They went ahead and did it anyway and, of course, that's what happened. They ended up with private maternity hospitals -

one or two of them very, very expensive. You know, like two or three hundred thousands dollars a piece. That first program they headed into was a disaster. I think it tended to dissuade the Bank from undertaking any other health/population programs for a while. I wouldn't blame them because they were, perhaps, poorly advised. That was only a small part of the picture but to give you some idea of the difficulties... you mentioned difficulties.

One of the other difficulties was convincing the leaders of a country that some kind of integrated maternal child health family planning program was good for their country and good for their own reputation and standing, etc. So we needed some kind of training program for country leaders; and the Smithsonian Institution came to our assistance with that idea and set up a program for meetings to be held with top notch demographers and sociologists and people like that to attend and teach courses.. a whole meeting, not so much teaching courses but informal information meetings for the ministerial and interministerial groups that might be involved in such activities. That became a project which again, was funded centrally; and Steve Sinding became the project manager, in due course. In fact, without him nothing would have happened once the original 2-4 year contract with the Smithsonian expired.

Q: He was where?

PRINCE: He was an AID employee in the AID Office of Population; I don't recall what his specific position was, but, as noted, he became the project manager for the Smithsonian project. He did a fine job with it. It was very difficult logistically.

Q: He would invite senior officials to some?

PRINCE: Right. I don't know whether it was evaluated but I suspect one might have found it too expensive; not very cost effective in terms of reaching all the people who need to be convinced of the merits of country-sponsored population policies in Africa.

AID Population Policy and the Cameroon Program

Q: What was the general AID policy on population and family planning at that time? Was it something you agreed with or was it...?

PRINCE: No, I mean it wasn't AID policy; it was Ravenholt policy. We were constantly at logger heads with one another. For example, the Ambassador to Cameroon in 1971 sent me an urgent cable saying, in effect, please help us, we need a program in health or something like that to help the people of Cameroon because their conditions are very bad; and I know it is not an emphasis country; but you ought to be able to do something about it. You're in charge of the population program aren't you? “See if you can work something, some sort of combined population and health program.” I stirred around and found out that they were, indeed, in the process of establishing a health personnel training program, a little like Gondar, where people would be trained in generalized health services. But they wanted the people to be doctors in the end. Jean Pinder went out there and came back with a very positive report saying that they were interested in a really good health cum medical program, training doctors to be good public health physicians as well. The University of Yaounde was interested in being the locus for the thing. In addition the French Government and the Canadian Government were interested in participating. So we began negotiating all around the place with them and with the Government of Cameroon. I went there several times. The upshot was the Centre Universitaire pour les Sciences de la Sant#. It was something that we had to fight for tooth and nail, because it was being funded out of Title 10 money 100 percent, at least for the first few years.

Q: It was being funded out of population money?

PRINCE: Yes, Title 10.

Q: For a medical school?

PRINCE: Yes right. For a center... a university center for health sciences. But you realize what we were really talking about was a form of medical school even though it had a

strong public health component to it. But, Ray said, “Where is the 'population' part of the project?” I don't want to fund health programs out of population funds. I said, “Well, how do you ever expect to have a population program in a place like Cameroon without starting with an integrated health program. You know Ray, you've never seen this clearly but you think Africa is the same as Indonesia and Thailand and Malaysia and those places. It is a terribly different world. I've never been in the Far East but I can guarantee that it is as different as it can be. Almost like comparing health/population programs in the United States and Africa. So don't think that all this work in Indonesia is going to work in Cameroon. The things are widely different. You have a large Muslim population; you know what was said about Muslim attitudes towards family planning... the Population Council's book on the subject. You know perfectly well that all Mullahs don't at all agree, by any means with this idea... some of them do but only with reservations. And you've got a big Muslim population in a place like Cameroon, forget it! You can't do it that way! It won't work. So listen to me and I'll get you your family planning; but you've got to give me a bit of a chance to try it out my way because I know what I am doing.” Finally, he agreed so we went ahead we got the money but not to build the whole thing (and I agreed with that too.) The Canadians (CIDA) decided to build the laboratory and public health component and so that the graduates could do good public health work, proper epidemiology diagnosis and so forth. We built the maternal and child health center very appropriately. The French built the rest of the teaching hospital—hospital, and classrooms, etc. WHO also pitched in to help with the teaching staff. Q: Did you get family planning included?

PRINCE: We got a lot of family planning into it. And we got a lot of converts in Cameroon among the medical profession there who were very interested in combining family planning with the health programs around the country. The Center set up a demonstration health center in Bamenda, which was very much like the health centers in Ethiopia, following the same general principles of delivery of decentralized/generalized health services, etc..

Q: But generally you had the same kind of problem of disagreeing with the agency policy on population?

PRINCE: Yes, if you consider Ray's policy as the basis for the Agency's. And it certainly was. I had problems with Ray's superiors, too, like Jerry Kieffer, his boss at the Office of Population, who more or less followed his lead; and almost at all times that Ray was there we were on a different wave length, when it came to the ways in which you could really expect to implement any kind of a population program, under conditions like those in Africa and in other truly underdeveloped areas of the world.

Involving African Doctors in Population/Maternal and Child Health Programs

Q: Are there any other dimensions of the Washington assignment that you want to discuss?

PRINCE: Yes, I think one of the most important... the way I thought it best to try and reverse the possible opposition of governments in Africa to family planning, was to solicit the interest and assistance of the medical professionals and their associations on the continent. And also I don't want to leave out the discussion about the Economic Commission for Africa. I'll come to that after I talk about the medical professional organizations.

I think, it was about mid-1969 that Jean suggested to me, “You know Bud, we need to get the doctors in Africa involved in these projects we are talking about these centrally funded projects. We need to get the doctors in Africa interested in this integrated family planning child heath idea. But in order to do that we need to provide some type of special training for them; you can't bring them all here; it doesn't make any sense at all. It should be in the African context. And before we can do that we need to get a consensus and therefore we need some kind of conference to discuss it. I thought about Jean's suggestion for a while and I realized an old friend of mine from New York State might be able and willing

to help... you know, several times I've mentioned the way in which my connections in New York had a definite bearing on successful outcomes in Africa... Well, this was another one. When I was in Syracuse as an apprentice epidemiologist in 1947, I met a doctor there by the name of Van Zyle Hyde (Van), who was very friendly with the Syracuse district health officer. I was introduced to him and we hit it off right from the word “go.” He said, “ You know Bud I want to go to Russia to look at their health program and when I get back I'll tell you all about it. A few months later he came back and there was a meeting of the State of Territorial Health Officers Association. Van gave a talk on health conditions in Russia; I said. “Van, you know. I'm kind of interested in this idea, too. Let's keep in touch.” So we did, and he became the Executive Director of the American Association of Medical Colleges, which was when I began getting interested in this thing. So I thought to myself you know, maybe Van knows somebody in Africa in the medical profession there that we can contact about this idea of having some kind of conference. He lit up like a candle when I talked to him about it. We got together and he said I'm going to a meeting of the executive committee of the Association of Medical Schools in Africa, AMSA. I know the president of it, Joe Lutwama, the Dean of Makerere Medical College. When we go back to our office, I'll call him and we can talk further. We did and of course I explained to Van what my problem was in trying to get doctors interested in the idea of health/population programs. He said, “We'll have to have a conference in which we really discuss all these issues and plan some kind of follow on.”

To make a long story short, Dr. Lutwama said, “By all means I think this is a good idea and I'll support it. If you can fund the whole thing.” But AID didn't want to fund all the travel of all the people coming from different countries in Africa to this meeting. It was set to be in Kampala because that's where Dr. Lutwama was. We wanted it to be a meeting of the AMSA, not an AID meeting or WHO meeting, but an AMSA meeting. We invited experts from all over the world to come to that meeting. In December of 1970 we had a preliminary meeting and it was agreed that we would ask Rockefeller Foundation for money to bring interested AMSA members and officials to the conference and we would

also try and get an executive officer and secretariat for the meeting from some place and ask AID to pay for that. So the long and short of it was that we got Jack Swartwood from the University of North Carolina to serve as the administrator for the conference. The Rockefeller Foundation took care of the money for doctors to come from all over Africa and paid some of the conference costs as well. Between the three sources of money we raised enough to hold this meeting in March of 1971; it was called... and I was the one who "invented" the title, "The Teaching and Practice of Family Health."

Anyhow, the conference was held in the big hall that was built by Idi Amin and, I must say, it was a great place to hold such a meeting. We had a stellar group from all over the place and the AMSA people really got behind this Africa-wide context. The conference came up with recommendations for regional seminars to follow up the major conference to get the training program going among the universities and medical schools around Africa. Van and I went to the next AMSA meeting in Yaounde. But, first, we went to a subcommittee meeting that was held in Douala, of a small group from AMSA, and including especiallMr. Swartwood representing the conference secretariat, which was particularly interested in the subject of the follow-on training to the Kampala conference. We drew up a draft resolution for the Executive Committee of AMSA to consider at its meetings a few days later. Then we went up there with the whole business, presented it; and then we kept quiet and left the doctors to debate the whole subject amongst themselves.

Q: These were all African Doctors?

PRINCE: Yes, all African, and they adopted that draft resolution with very few changes.

Q: What was the thrust of the resolution?

PRINCE: The thrust of the resolution was: "the AMSA wishes to support the training of its members and the involvement of its member associations in the training of physicians in appropriate training facilities in Africa to engage in integrated maternal and child health/ family planning and research." They said in effect we believe that this is a very important

approach and the conclusions of the conference in Kampala represent the wave of the future - we've got to do it. So by golly, darn if they didn't. And that's how the whole business of integrated maternal and child health and family planning got started in Africa in practice - not just in theory! Nobody knows that unless they were at the Conference or have read the Proceedings.

Approach to Policy Formulation

This brings me to a point that is of great importance for consideration by AID personnel and anybody else who may have qualms about it. I went to a meeting of the NCIH (National Council for International Health) a few years ago and there was a paper delivered by somebody about policy formulation and how difficult for anybody outside of a small group to get involved in it. You know the U.S. Government, from a practical point of view, is very insular. It doesn't involve any “outsiders” in policy formulation. I had the temerity to get up in the NCIH meeting and say, “The problem with you guys is you don't realize that you've got to become part of the organization whose policy you want to influence!” You can't influence from the outside, of course; you have to influence from the inside! Also you have to know what you are talking about; you can't do it from a point of view of not being aware of all the technical, administrative, and related factors involved. So it means you've got to be part of the organization, be experienced in its problems and in the programs that it supports and then work in a positive and constructive way from within the organization. If you are working in a developing country you have to be a part and parcel of their organization as well, because you can't persuade them to do it, any more than you can get the U.S. Government to do it, if you don't belong to the organization. If they don't have a feeling of confidence in your professional judgement . The “client systems'” confidence in your professional judgement is essential if you want to get things done. You have to work at this; it's not easy. It takes a lot of time and effort on your part and a lot of experience and knowledge of the subject. But when you have that, it's the strongest key you've got for involvement in policy formulation. So I guess my comments shocked everybody... I said you want to know where these policies came from your looking

at the guy who had a lot to do with it and not by any means all of it. I adequately prepared you for that because, I said, I'm not the only person involved in this; but our team set policy for and with AID that nobody, probably to this day, has any idea that we did, to that extent.

The Beginnings of UNFPA

And you know there was another policy issue that absolutely nobody knows anything about. It has to do with the “creation” of UNFPA. I don't know how much of this, even now, is really understood. But I should start by acknowledging that AID support of UN participation in population and integrated population/health programs in Africa stems from my connection with the ECA (Economic Commission for Africa) and my acquaintance with the people in the UN system over the years as I got to meet them in various meetings in New York and Geneva (as I have explained earlier in this “Journal”). I developed a great respect for their understanding and appreciation for local sensibilities in developing countries. I thought it was a good thing for us to take advantage of that sensibility, if you can put it that way, and work with them in trying to think about the objectives we all had to improve the quality of life in the developing countries.

Consequently, about the time it became clear to me that it was necessary to clarify what our policy was in AID, the population/family planning end of things in Africa, I received an invitation to attend the first Interagency meeting on population and demography at the Economic Commission for Africa, held on November 29, 1967, while I was on my first program development trip to Africa. At this meeting at ECA Headquarters in Addis Ababa, I had an opportunity to answer questions which the Chairman of the meeting asked me about what AID's view might be in assistance to UN in the population program area, what the new legislation was like in terms of the breadth of the programs we could support, etc. I told the group that the new legislation was very broadbased in its conceptualization of the relationship between maternal and child health service and family planning services and that they could well be integrated and be supported by AID and that a considerable sum had already been put aside for population work; but some of this could be used for

the integrated type of approach which I have outlined. This included support to the ECA in assisting them to employ qualified people as regional population advisors in some of the countries in Africa and undoubtedly in other regions as well, but here we were only speaking of Africa. Obviously all of this would have to be discussed by the appropriate officials in Washington but I thought I was representing them correctly so that there would be a sympathetic hearing for such an idea because it was going to help, in achieving our more or less identical goals.

This was accepted and I followed up when I got back to Washington in meetings with UN officials in New York and on their visits to Washington and also with our Ambassador to the UN. I asked them if they thought that was a correct interpretation of the policy and they thought it was. This gradually led to more directly collaborative relationships between the UN and AID in terms not only of funding but participation in decision-making so that in the end it led to the conceptualization of a UN organization which would play a major part in promoting family planning and integrated development activities around the world, in other words the UNFPA. So I think probably what we had done in Africa had some considerable part to play in the establishment of UNFPA and the fundamental reasoning for its establishment and its collaborative stance with the U.S. Government efforts of this kind around the world.

In addition to the above, I should emphasize that my “colloque” with UN organizations began when I became interested in cost/benefit analysis of social projects and the work of the UN Research Institute for Social Development, in 1961. I persisted with the follow up of that program for many years and was lucky enough to get a copy of what I think is the first document on trying to establish some kind of way of measuring the quality of life, which you know is a big problem even today. I think I read to you the title before but I didn't say who had written it. It was by an economist from Poland by the name of Jan Drewnowski. It was dated Geneva 1970 and was one of the papers that was discussed at the conference in Rennes to which I had referred. It also led me to fairly frequent visits to UNRISD where I became aware of the work they were doing in trying to establish micro

and macro- economic analyses of what was going on in various countries in Africa. This became important in terms of the eventual appearance of the World Bank Development Report, and the African Population Studies Series which was published by the United Nations beginning in 1973— also a number of reports by ECA.

It also may have led to my being invited regularly to all of the meetings of the UN Committee on the African Census Program and the ECA meetings of the non-UN organizations interested in population matters. I have records of all of the meetings that I attended for quite a few years starting with the first ones, e.g. I have the African population studies series Publication number one, in my library. I like to see the continuity and validity of the way in which the UN activities have been pursued in these areas. They certainly led to, if they were not actually instrumental in, establishing the world fertility survey (WFS) and the subsequent demographic health survey which is a continuation really of WFS. The whole thing in a way can be traced back to the early work of the UNRISD and their attempts at macro and microeconomic analysis of what was going on in the countries and the relationship of these activities to their concepts of the way in which population changes impacted upon them. So I think the UN deserves a lot more credit, probably, than they get, for having been early seminal thinkers in this whole field. I also feel very grateful at having had the opportunity to participate with them in some of this thinking.

Q: To sum up here, your Washington role... do I understand it correctly that you were the prime mover for a lot of U.S. Government, or AID concepts within the U.S. Government, for population program development in the African area.

PRINCE: That's correct. I certainly think I was. The fact that I was, as you know, the signer of that original CA -1491 makes it pretty much official.

Q: This extended over what years?

PRINCE: Well from the time I began my revisits to Ethiopia, to attend the meetings of the ECA, where they were making decisions about some of these matters, even though I had

met the ECA people before then, while I was actually posted in Ethiopia. Certainly much of the decision-making came afterwards.

Q: That was 1967?

PRINCE: Yes, beginning in 1967

Q: And extending...when did you leave Washington?

PRINCE: 1973. But, since I was then posted first as Director of the AFR Regional Population Office in Accra and then as HPN Projects Officer for the Accra Mission (after disbandment of AFR/RPO in 1974), I was in a good position to continue my interest in the follow-up efforts with ECA in Addis with the UN-assisted HPN project activities, albeit primarily in relation to my work in Accra. But still with an Africa-wide emphasis as well, for obvious reasons.

Formative Role in Population Programs in Africa

Q: Then for six years you had a key role in a formative period for population programs in Africa?

PRINCE: Right a very formative time. The same thing applies and I can't emphasize it enough, to this whole thing in that I had such marvelous support from all of my staff and the people in the country, the people in the UN and in the U.S. Embassies. It was really a most enlightening and rewarding experience.

Q: How many countries, do you remember... during that period adopted family planning programs of some sort with AID support?

PRINCE: A good question. I would say of the some twenty-five countries I worked in, I bet half of them did have some kind of family planning activities that they hadn't had before.

Q: And these were all primarily integrated family planning/maternal and child health activities?

PRINCE: That is correct. But we didn't neglect contraceptive distribution and the educational program to go with the supply of contraceptives. Because nobody in his right mind would recommend a family planning program without making available the contraceptives. I must admit we didn't always come across with the contraceptives as well as we should have; there were numerous problems, as you know in the early phases of the program with, e.g., the design of the contraceptives: arguments about whether IUDs were ok and which ones were the best and what color condoms worked best, and what kind of directions went with all these things. They all had to be in different languages because obviously, if you send in an English language leaflet, it doesn't mean anything to some one who speaks nothing but Swahili! All of that stuff had to be learnt the hard way, I guess.

Q: There were demographic projects, too, and at the same time?

PRINCE: Yes, and they were very important. The U.S. Bureau of the Census played a major part in this whole thing and in fact the idea of applying the concept of demographic sample surveys, e.g., using the Chandrasekar-Deming dual registration approach, to getting reasonably accurate data on infant and childhood mortality rates, was absolutely essential, in my opinion, to the successful study of existing and changing infant and childhood mortality rates in African countries. This was a function of the fact that they had such a poor birth registration and death registration system that the data were of limited use in long range analysis. This has now been corrected thanks to people like John Rumford, who did the landmark study in Liberia, which I also have a copy of by the way. I brought it with me today. It was entitled “The Use of the Chandrasekar-Deming Technique in the Liberian Fertility Survey” John C. Rumford, M.A. This is quite something because it shows for the first time the conclusive and striking difference in the infant and childhood mortality, and other mortality data, in rural and urban Liberia (”The Use of the

Chandrasekar-Deming Technique in the Liberian Fertility Survey-Problems with Field Applications of the Technique," Rumford, John C., M.A., Public Health Reports, 85,11 November 1970).

Q: This was funded by AID when you were there?

PRINCE: Absolutely, funded by our population division, Africa Bureau Population Division at my insistence. It was the first... let's see if I can find a few figures in here..the difference between these rates in rural and urban areas were clearly identified and the methodology used. I can't find it right now.

Q: We don't need to get into the technical aspect.

PRINCE: Anyhow it gave us a good handle on how to get meaningful data of this type; and without that we would have been unable to establish the nature of these dimensions of the problem or be able to evaluate the impact of our program. The Bureau of Census also did a lot of other things. They were asked to assist with the establishment of a demographic training institute at Makerere University in 1972-73. This was done.. they sent a good computer programmer and demographer can you imagine, in those days, we paid for the whole computer set! It was quite something and all air conditioned. And with that they were able to carry out a top notch supplementary census (in 1974, I believe, it was) I feel that the collaboration between the US Census Bureau, AID and the UN and its specialized agencies and the host countries, was materially benefitted by the relationship.

Q: Good. This is February 15, 1994, the continuation of the interview with Dr. Prince. Carry on, Bud.

PRINCE: As I said, at the conclusion of the comments about the work as population division chief of the Africa Bureau, along about early 1973, we followed up on CA-1491 and established a Regional Population Office in Africa.

Q: That was the policy airgram that we mentioned before.

PRINCE: Right. The Regional Population Office was specifically provided for the purpose of making sure that the Missions had expert technical advice and cooperation for themselves and the country they were working in, in the absence of population officers in most of the Missions at that time. It was early in the game and they hadn't been able to provide qualified people for that area. The office was established and the first director was Dr. Ernest Neal; (he had been Mission Director in the Philippines for some years and he was available for this kind of a job.) With his excellent AID administration know-how and his interest in health/population and nutrition from his experience in the Philippines, he was the ideal person for the job. It was set up in Lagos in those days and it continued there for about seven or eight months and then transferred to Accra. You may recall they had to build... one reason for the delay was they had to get a building built for the Regional Population Office in the rear of the compound that the Ghana USAID Mission was located in. Of course, the Regional Population Office was a class 3 Mission itself, so it had to have the security and all that business. The result was that it was finished just about the time I got there in the late Fall of 1973 and Ernie had come back to Washington and was reassigned to Sierra Leone as Mission Director. One thing that you have to realize is that the whole time I was in Ghana as the Director of the Regional Population Office, I, of course, traveled all over Africa and I even did a fair amount of traveling in other countries in Africa when I was the Health Population Nutrition Officer in the USAID Mission in Ghana because I had a double function for a while as Director of the Regional Population Office, which wasn't closed until the summer of 1974. Consequently, I traveled quite a bit and my activities from the Ghana Mission included other countries in Africa and attendance, for example, at the first Africa Population Conference in Ibadan, Nigeria in 1974.

Q: Who sponsored that?

PRINCE: Interestingly enough, the Population Council, the UNFPA, and the International Union for the Scientific Study of Population (IUSSP) were the major sponsors of that

conference. I had been a member of IUSSP since 1969 so naturally I was invited to attend the conference. It was the first real get together of all the people in Africa interested in population affairs, together with professionals from all over the world. I must say, there weren't that many from Asia; mostly attendees from Africa and donor agencies... Scandinavian countries and, of course, the United States. The Population Council was well represented so were IPPF, Pathfinder Fund, etc.

The result of that conference was to put population on the map in a very clear and determined way for the whole of Africa. It also led to the establishment of a journal called Jimlar Mutane but unfortunately the latter was not well financed and there was never more than Vol.1 number 1. There were excellent articles in it by people like Sam Ghaisie, who got his doctoral degree with the demographic sample survey in Ghana that we had established as a result of our early connections with the University of Ghana, Institute for Scientific, Social and Economic Researc(ISSER). Dr. Ghaisie was one of the first demographers assigned to that department in the university.

Also, it is necessary to say that I had had contact with health people in Ghana going back to the first African population development trip that I made when I got back from Ethiopia in 1967, and the subsequent one in 1968 and other trips - there must have been four or five before I was posted to Ghana as the HPN officer. These helped to develop working relationships with people like Drs. Fred Sai, Fred Wurapa and Ghaisie as I mentioned, and others in the University... the Dean of the Medical School, Dr. Silas Dodu, and subsequent directors of the Medical School and teachers at the University, the Ghana Institute of Management and Public Administration, etc. I knew all these people before I got to Ghana and had actually worked with them and thought about planning the population program in Ghana, because, after all, that was part of my job with AID from here. But I couldn't do it all here. So I went there and talked to all these people. It was also possible for me to meet the person who subsequently became the director of the Ghana National Family Planning Program, Dr. Augustus Armar, who is an obstetrician/gynecologist specialist. At the time I first met him in 1969 he was the medical director of the Ghana Family Guidance

Council. That was an important series of connections that were made during those years and, finally, the establishment of the Ghana “White Paper” on Population which, of course, is a very important document - the first of its kind in Africa. Hence, I believe, it deserves further comment as follows:

The writing of the policy paper and the beginning of its implementation occurred while I was still with the position back here. A lot of the meetings that led to my becoming acquainted with Dr. Robert Gardiner (former General-Secretary ECA and later Ministry of Economic Planning in Ghana) and his interest in the population area in Ghana, were held in the ECA, which I was invited to attend, in my position as Population Officer for the Africa Region. As already indicated, I was invited to those meetings of the ECA, meetings of the non-UN Organizations interested in population affairs and the African Census Program - two different types of meetings. I always went to all of them; I was invited as a matter of routine after a year or so. Consequently, I met many of the UN people and Dr. Gardiner and I struck up a very pleasant acquaintance that helped in furthering the population business when I got to Ghana. During the first eight months of the time I was in Ghana, I was both the Director of the Regional Population Office and the Health, Population, Nutrition Office in the Mission. The result was that there was a lot of emphasis on the population part of the program which was, of course, very appropriate, and the Mission was especially interested in that aspect of the work, as I was on behalf of the Agency. In fact, I had a lot of pressure from the Office of Population to put more population programming and more quickly into the Ghana HPN program than I thought was perhaps appropriate considering the basic philosophies contained in CA-1491.

Q: Was the Agency's policy changing or had it changed by the time you got to Ghana?

PRINCE: It was changing, at least from the population programming point of view, for our assistance to African countries.

Q: In what way?

PRINCE: Along the lines of following the recommendation that we should in deed look upon population programming as part of an integrated development effort with the health component playing an important part in it. The support of the Africa Bureau for this idea was very strong.

Q: Was that the Agency's view, generally?

PRINCE: I would say it varied a good deal between regions but basically, probably it was not general Agency doctrine, because the leadership for population programming for the Agency was, as you know, in the hands of individuals who were committed to the idea of the concentration on population programming per se using Title 10 funds for the narrower conceptualization of promoting only population activities that could be directly related to population control. And, of course, that was quite a different point of view from the one we were espousing in the Africa Bureau. But there was nothing illegal or counter congressional intent to what we were doing because in the Foreign Assistance Act as amended in 1971, Title 10 funds were to be available not only for population work directly but also for related public health clinical and health promotion and preventive medicine activities that could be considered part of a general health program. It was specifically stated that population funds could be used for those things as long as they included a significant population component. It was also stated that loan funds could be used for grants under certain circumstances and these could include the health part of the thing I was talking about. Consequently, there was nothing against the congressional intent that was inherent in the point of view that we were following. And the result was that we were able to do it, although it took a fair amount of arguing and discussion... positive talking on the part of all concerned and eventually the Population Office here in Washington came along with the idea because they could see that it was in fact essential to have a combined program in a country like Ghana because the people were not interested in population control alone.

The Ghana National Family Planning Program, as set forth in the White Paper specifically cautioned against looking at population as a single kind of program and insisted, quite appropriately, that it had to be integrated with improved health and agriculture in the country. I certainly agreed and, as time has gone on, I think we have been proven right about that, although there was never any question in my mind, or anybody else's in the population program field that there had to be a strong contraceptive component of these programs; otherwise you wouldn't have anything to build on to integrate with the maternal and child health programs. If you didn't have a strong fertility control/child spacing program in the nature of an overall improved family health program, then, as we had said in the 1971 meeting in Kampala, you didn't have sufficient justification for a health program and, of course, vice versa... together it was very clear that family health was, particularly, beneficial to children and mothers. The significance of the extension of birth intervals had already been shown, for example, by French demographers in Senegal, e.g. Pierre Cantrelle, to be directly related to improved health and reduced infant mortality. So there can hardly be any question that the family planning component of a maternal and child health program was as essential to the success of that program as, for example, immunization efforts. Although, to be sure, when the latter worked really well - e.g. in smallpox eradication - they were absolutely unapproachable in terms of achieving overt and immediate improvements in the population's health and quality of life.

Q: Wasn't there a move to include population components in education projects and agricultural projects, etc.?

PRINCE: There wasn't... education maybe, but I think the education part of it was mostly in the training of population workers in the host governments and... we had projects in Ghana for this purpose and the explanation and support of the concept that a thorough knowledge of the importance of effective population program support was essential for most of the civil service cadres. You remember that we had the Smithsonian-led project for that specific purpose - a centrally funded effort to bring the whole population question, in

all of its dimensions, to the attention of leaders of many countries around the world, and particularly, in this case, in Africa. They held seminars for this purpose and then eventually a contract was let with the University of North Carolina to establish a program at the Legon Campus (University of Ghana) to have courses for government leaders, not just from Ghana but for leaders from other countries in Africa to help them understand this basic truth: there was a population problem; it was impinging negatively on the development of African countries, but it couldn't be looked at in a vacuum. It had to be part of the whole picture of development; and why it was a problem, and how the integration was to be achieved was the subject of the seminar. It was quite successful from a technical point of view. As I pointed out in the paper on “Sustain;” however, due to administrative problems in the University, they didn't have the meetings when they were supposed to, and the project was finally discontinued.

Q: You mentioned earlier the Ghana “White Paper” on population; was that the first one of its kind in Africa?

PRINCE: It sure was. There was a paper which was not an official White Paper, that came out of Kenya in 1969 a few years before the one in Ghana was formulated and promulgated. The Kenya paper was the first one that had the support of the government in a sort of semi-official manner; but it was not an official White Paper, although quite similar to the Ghana paper in technical content.

Q: The same assistance...?

PRINCE: Yes, the same technical cooperation from the Population Council and Ford Foundation in both cases.

Q: USAID was not involved?

PRINCE: Not in the Kenya paper.

Population Programs in Ghana

Q: And in the one in Ghana?

PRINCE: Certainly, sure... Dick Cashin (former USAID Mission Director in Ghana) and the population technician on his staff who was also, I believe, an experienced program officer must have known about the Paper while it was under preparation.

Q: Was the Population Council funded by USAID?

PRINCE: The Pop Council was partially funded by USAID even in those days; they got money from USAID right from the beginning... About 1967/68 they began to be funded and they had projects in other countries in Africa, particularly in Nigeria, which I was very much involved in as a result of my being the Africa Bureau Division Chief for Population and, later, the Director of the Regional Population Office. So I went to NY several times to talk to the Population Council and Ford Foundation representatives. In addition, they had people, in situ, in various countries in Africa in those days and I met several of them during the course of my field trips. I found this most helpful as a means of exchanging information and ideas.

Q: What was the Government's reception to the policy paper? Was the Government involved?

PRINCE: They were very much involved. All the assisting agencies realized this as a necessity. Mr. Omaboe, the Minister of Economic Planning, was the person who signed off on it for the Government, but he also, I think, played a major part in writing it. However, they had substantial assistance from the Population Council and the Ford Foundation representatives. And Lyle Saunders, who, I believe, was the Population Council Representative. He wasn't posted in Ghana but he was circulating around in Africa and helped in a consultant's capacity to write that document, no question about it.

Q: How well accepted was the policy in the government at that time?

PRINCE: It was not totally accepted, I think, for example, unlike the subsequent efforts we carried out in the health planning field there was no “Operation Dialogue” connected with it. I'll explain that when we come to the health part of the program. The participation of provincial and district levels in the formulation of the White Paper was minimal, I believe, so it may not have had as much support at those levels as one would have hoped for. However, it certainly had the support of the Government leadership; no question about that at the top level. And, as you know, the Ministry of Economic Planning was one of the strongest Ministries in the whole governmental organization.

Parenthetically, I might point out that I had some discussions with the Ford Foundation Representative after Lyle Saunders left. I can't remember his name, but he was resident in Ghana for a while. I complained to him when he was visiting Washington about the time the Paper was being completed, that I wasn't sure it was such a good idea to establish the Ghana National Family Planning Program, which they had done with its roots physically, and to a large extent administratively, in the Ministry of Economic Planning and Development. I said, “You know the people who are going to carry this out are not mostly going to be Ministry of Economic Planning people. They're going to Ministry of Health people and their noses are going to be out of joint.” Nevertheless, he said, “Well, the Ministry of Health... its organizational development is very weak and we feel that they can't surely put enough muscle into this plan to implement the provisions of the population paper. Therefore, we felt the trade off... we recognized that it would be nice to have the Ministry of Health involved but when it came to deciding... when the chips were down, it was determined that the Ministry of Economic Planning was the best place. We all lived to rue that fact for a long time. And as you know now the population program... this information is right off the top of my head and I don't know whether it is accurate or not... but I do know that the contraceptive program has been switched almost entirely to simple

distribution of ... commercial distribution of contraceptives. And that work is now mostly being supervised by the Ministry of Health!

The thing has, apparently, come full circle back into the Ministry of Health; but whether or not the Pharmacy Board has approved the distribution of oral contraceptives without prescription, I have no idea. But I can say that was the major hang-up for our program for years. The whole time I was in Ghana and subsequently for many years, we never got full approval to distribute oral contraceptives without prescription. You know, it is impossible to carry out any kind of general effort to get oral contraceptives used ... to increase the contraceptive utilization rate which, you know, is the whole objective... without approval of the medical profession. It was a constant battle about that because of the way the thing started. This is one of the reasons why it was a mistake to put it into the Ministry of Economic Planning in the beginning. Dr. Augustus Armar, Director of the Ghana National Family Planning Program (GNFPP) was a very fine person, absolutely, fully committed, to the program; and I liked him personally, very much. In fact, we wrote a paper together about the physician and population change pointing out that the M.D. had major responsibilities in guiding his patients' reproductive practice and health (Armar, A.A., F.R.C.O.G and Prince, J.S., M.D., “The Medical Ostrich Has Buried Its Head in the Sands of Biological Science and Turns Its Backside to The Major Social Issues of Medical Care Today” Unpublished, but presented by the authors at the World Population Society annual meeting ca. 1989.). (Annex 18) But, as events turned out, he didn't have good connections with the key Ob/Gyn people in the medical school, and this apparently affected relations between the GNFPP and the Ministry. Consequently, he was never really able to get the fullest cooperation from all those people, which was essential to make the program work, and particularly, to get the approval to distribute oral and related types of contraceptives without prescriptions.

That was a tremendous hang up and nobody paid much attention to it even though I was hollering about it the whole time. And I don't know why it missed the point in all of our discussions. To say that the Pharmacy Board was just a Board and not too important,

that's ridiculous. First of all, the Board is composed most of all of physicians; and secondly they had the authority and responsibility to make decisions like that. The answer is that the Government was in a way behind the thing but not fully committed in all the necessary departments and Ministries. I'm afraid that this has been the story all over Africa—it always has been difficult, and the Smithsonian effort, previously referred to, was very well-conceived and totally justified.

The problem is to remember that decisions are made by people in the power structure of a country, of a community, of a district or whatever organizational development area that you are talking about. You start with them then you gradually get to the community level and to the household level. Gosh knows, I'm fully aware of the importance of the household and it is coming out in today's literature: the household is where the decision has to be made. But how are you going to get to the household and convince anybody in the household in a village where the chief is utterly opposed to something; that's ridiculous. If he's opposed to the thing that you are trying to sell forget it. I remember we went to a meeting to help in promoting the idea of the Ghana National Family Planning Program in Bawku in the Upper Region. And the only way that meeting could go, and the reason why it was successful was because the chief came to the meeting and gave the opening speech. And he supported the program very strongly. The only problem with the meeting was that they didn't have a simultaneous translator that was needed because there were people from two or three regions there and they didn't all speak the same dialect; they needed some simultaneous translation. But otherwise it was a huge success and, I think, it made a big difference in the attitude of the people in those communities towards the whole program in subsequent years. But to get the chief involved was an absolutely key element in the whole thing and I spent a lot of time and effort on that and so did everybody else; we knew by then that these things were essential. It's, thus, not as simple as throwing contraceptives out on the table and saying everybody's going to use these if you tell them how to do it. Nonsense!Assignment in Ghana

With that lengthy introduction, I can now embark on the detailed nature of what we did in Ghana and when I say we, I mean the Mission Directors that were involved before you and after you and the staff as well. Nothing could have happened without the full cooperation of the entire Mission, from the Mission Director to the Program Office and to supporting logistics efforts of the Mission staff. It was absolutely fantastic in Ghana; and in all my experience in Africa, I never had a greater degree of cooperation and active support in urging forward and participation in the technical aspects of the planning to the extent that I did in Ghana. If that overall HPN program was successful and its sustainability turned out to be so, a major part was due to the efforts of the entire Mission staff.

Before Dick Cashin took over, I met Frank Pinder (earlier Mission Director) - that was during the 1967 field trip. And I began talking to him about this. The only program we had going in the population field in Ghana that early on was the demographic sample survey project with Sam Ghaisie at the University of Ghana (ISSER) that I mentioned earlier. As described below, it was a huge success.

The survey was carried out and Dr. Ghaisie got his doctoral degree in demography from the University of Canberra in Australia. One aspect of the Demographic Sample survey was detailed and publicized by Dr. Ghaisie in the first issue of the African journal Jimlar Mutane (Ghaisie, S.K., “Levels and Patterns of Infant and Child Mortality in Ghana”, Jimlar Mutane-A Journal of Population Studies in Africa Vol.1, No.1 ppg. 41-55). However, the entire project was beyond the financial means of the Ghana Government or Dr. Ghaisie and required both technical and financial assistance. The former was provided through the good offices of the U.S. Bureau of the Census in a Participating Agency Service Agreement (PASA) with AID for one of their consultants, Mr. Abner Hurwitz, who kindly made himself available for the assignment. He came to Ghana in 1965 and worked with the, then, Mr. Ghaisie on many of the technical and operational aspects of the survey, spending, I believe, a total of some 5-6 months in the country during several visits. That project, as indicated, was financed by AID as the first in a fairly lengthy list of

health/population/nutrition projects undertaken by AID, in Ghana, between 1968-1979. The project was entitled, “Family Planning and Demographic Development” and was completed in 1972 at a cost to AID of $244,000. This was a quite reasonable cost it was felt, considering the great benefit from the project, in setting the whole background and basic framework, etc. for continued demographic sample surveys in Ghana.

The idea of national demographic sample surveys was further taken up and elaborated on by the AID centrally-funded World Fertility Survey ten years later. And then that became the Demographic and Health Survey Project, which is still going on. The effect of the use of that technique, plus the work that was done by John Rumford in Liberia, which I mentioned in our last session, to establish the value of the Chandrasekar-Deming technique for carrying out a demographic sample survey in that country to show, for example, the difference in infant mortality rates in urban and rural areas, was essential background for both the World Fertility Survey and the Demographic and Health Survey later on. So much for that.The Danfa Comprehensive Health and Family Planning Project

The next project was the Danfa Rural Comprehensive Health and Family Planning Project. The story of that project is a whopper! I'll just list the major document which covers the whole project and has a complete bibliography in it. It is readily available, I would think, in our libraries here and certainly at UCLA which was the contractor for the project. It is entitled, “Danfa Project Final Report. The Danfa Comprehensive Rural health and Family Planning Project” September 30, 1979. It comes out of the University of California and the Government of Ghana. The “authors” are listed as the University of Ghana Medical School, Department of Community Health and the UCLA School of Public Health, Division of Population, Family and International Health. So there you have the final result of the Danfa Project which had its origins, I believe, not only in the early acquaintance of the project director from the University of California, Dr. Alfred K. Neumann with Dr. Fred Sai, beginning in 1965 when Professor Neumann was, in fact, working in Ghana. The

opportunity I had to meet Dr. Sai at the conference at Kampala proved another ice-breaker (among others, e.g. at the APHA annual meetings, etc.).

Q: I think they were both at Harvard's School of Public Health.

PRINCE: Yes. Both of them got their Masters degree at the Harvard School of Public Health. Since Professor Neumann had a very broad view of the practice of public health... the same as I did...and was aware of the importance of integrating population/family-planning activities into it, I think this idea was passed on to Dr. Sai. It was the research side of this program, however, that attracted Dr. Sai in the beginning because in 1968/69, he tried to obtain assistance from the UNDP to fund research training for the medical students and especially for the Department of Preventive Medicine and Community Health at the Medical School, of which department he was head. Because the Ghana Government expressed a lack of priority of that type, for the UNDP funds allotted to Ghana, the money was not available. Consequently, when I visited Ghana in 1967-68, it led to meetings with Mr. Cashin and his Program Officer, Fritz Gilbert, which was the “opening gun” in the planning of the Danfa Project. I felt very strongly that it was the kind of thing that should have its initiative and technical support at the Ghanaian level rather than from outside. Dr. Sai agreed with this fully... and with the concept I suggested to him of trying to settle the issue of whether or not family planning programs were better administered if they were a part of an integrated maternal and child health program or run as separate free-standing activities... something that was very important to find out because, in almost all of the African countries, it was a big problem to try and talk about free-standing family planning activities in the absence of other support. (This had been codified, as you will recall, in our message to the field in that Circular Airgram-1491.) He agreed that this was a major consideration and that we ought to try and get money to carry out such a research program. He wanted to emphasize the fact from his point of view, however, that the main purpose for the project was to provide him with a research and

training facility where he could improve the capability of his medical students to carry out this kind of work when they graduated.

Q: You said the policy paper for AID had emphasized the integration of family planning and maternal/child health care services. And yet here we are coming up with a research project to determine whether that was necessary, to determine which was more effective?

PRINCE: Which was more effective, that's right.

Q: Even though we had already decided it was necessary?

PRINCE: We may have jumped the gun on that, but it wasn't entirely beyond the realms of likelihood... not just possibility... that this was the correct point of view and we certainly had this driven home to us when we made the first two visits to Africa after I became Director of the Africa Bureau's Population Division population program. We got told in no uncertain terms, in most of the countries we went to, that they weren't interested in a separate family planning program or in population control, per se. This was not even in their language. The only place where we found a fairly positive attitude towards this kind of approach was in Tunisia and, I think I mentioned in one of the earlier parts of this story, the results of that approach were not very successful, for the very reasons we are talking about. And this course of events was sufficient to satisfy me, in my judgement, to send that type of message out to the field. The reason for the Danfa project was also nonetheless valid because the issues involved in procuring local support for contraceptive-oriented population programs hadn't been settled from a technical point of view.

The project was gradually developed and I remember Fred Sai attending a meeting of the World Health Assembly and he took some time to revisit with his old friends at Harvard and I was in the States at the time and met him in his hotel room and Fritz joined up... he was also back... and that was when we sat down and really worked out the study design which originally included the notion that we would have a project similar in principle, at least, to the one we had done in Ethiopia where we employed

experimental methodology to compare “control” and “experimental” communities. The control communities in Ghana were, of course, the ones without the comprehensive approach to provision of health and family planning services, and the experimental one(s) the community with the demonstration family planning integrated maternal/child health program and comprehensive health services. This community was Danfa and, thus, the Project was called the Danfa Project (short title). The reason for its choice was also because the people in the community were willing to put time and effort and money into the construction of necessary facilities. The whole thing gradually developed along those lines and by 1969 .. early 1969.. we began looking for university support in this country. At that point Professor Neumann of UCLA and I met.

We hit it off right away and in due course, he got to meet everybody at the USAID Mission as well as in the Ministry of Health and the Medical School. He helped flesh out the research design into a project paper with Dr. Sai and his staff and particularly Dr. Fred Wurapa, who was teaching epidemiology in the Department of Community Health and Preventive Medicine. The project paper reached a point where it was ready for final preparation and it was decided not to do a contract with the UCLA. The contract office said that wasn't appropriate for this kind of thing and it should instead be an international development grant. So the arrangement was carried out in that form, and it gave the University much more flexibility and freedom to make decisions as to moving funds around from one item to another and generally running the project primarily as a university project rather than under the constant watch of the AID contract office. This didn't mean, of course, that thorough oversight by the contract office was neglected, but it gave the university a greater chance to exert its own authority and responsibility to make this a successful project. This was only half the story. The other half was that the University of Ghana and the Medical School and the Ministry of Health and the Government of Ghana - all supported this approach to the project to the fullest extent possible.

The characteristics of the administration of the project from its very start in 1970 were notable in that the devolution, of authority with responsibility, to the Medical School was

pronounced, from day one. The Project Director from the Medical School, who was Dr. Sai in the beginning and then Dr. Ofosu-Amah later when Dr. Sai left to join IPPF... was unquestioned and even to the point of how papers, scientific papers were to be handled. The effort was made to assure the authorship and 100% involvement in the scientific and formative nature of the paper by the University of Ghana Medical School authors. The result was that all papers were jointly authored and the senior author was always the University of Ghana Medical School scientist. About 100 such articles were published before the project was completed some 10 years later. They are all relevant topics to the project. The references are in this final report and there are too many to even mention here but they cover the whole field of comprehensive health/ family planning services, research, epidemiology... even to the point of studies like the control and eradication of Guinea Worm, which is now a major program in many parts of Africa. Of course, smallpox eradication was certified in 1975 by WHO and the Danfa project had that as an early program; but in Ghana, it had tapered off to almost nothing before 1975 since the disease, basically, had been eradicated. All other activities in the field of health were subject to evaluation and participation by the Danfa Health Center as appropriate and consequently it was definitely a health center as well as a population center. It was a truly integrated effort. That was the way it was designed to be and that's the way it worked.

The only thing that was a serious problem with the project in my opinion was that, in the way it was originally designed, it required correct and well-carried out cross sectional demographic baseline data, including infant and childhood mortality rates in all of the communities, “experimental” or “control.” And there were four of them: the Danfa Center, another community provided with health education and family planning services, a third with normal Ministry of health activities plus family planning, and a fourth with no special health or family planning interventions, just the Ministry's normal health services. In brief, it was important for the cross sectional survey to provide an accurate estimate of the demographic distribution of the population by age, sex, infant and childhood mortality

in the four communities, for this research design to work; so that we would be able to measure the change that occurred in those same parameters four or five years later.

Unfortunately, UCLA had a major part to play in this, i.e., in generating the problem, if I may say so. To wit, the University apparently came to the conclusion that it would be too expensive to pay registrars to carry out the surveys; so they recruited volunteers from the University to do the work. It wasn't until the thing was well along that they discovered that the work was not accurate; and consequently, the results could not be trusted from a statistical point of view and the study had to be changed from a true “research design” to a “panel study” where you use the baseline status of each of the “cells” of the study as its own control; that is not as accurate as comparing one community, the experimental community, with a control community or with a different “service-mix” community. And you don't get a good proof of the thesis that the comprehensive approach program either works or doesn't work better than the other program. You get a proof of whether it works or not, as compared with the way things were before, but it is very difficult to draw conclusions about the relationships. This was the only major weakness in the study... in the technical aspects of carrying out the project. For those who might be interested in knowing how much something as complex and as astronomical in size and detail costs, with all the people who had to be involved in it, all the program elements, etc., it was expensive... $6.0 million for the whole business from start to finish. And, in those days, that was a whale of a lot of money and, incidentally, a little more than six times what it cost to do a somewhat similar study in Ethiopia from 1961-67, the Demonstration and Evaluation Project, which I have already mentioned and which from a methodological point of view was quite significant in leading us, at least in the beginning, to the conclusion to use the experimental study design in Ghana as well.

Q: In the original design, wasn't it supposed to be much shorter?

PRINCE: Yes that is true. I guess as nearly always in projects of this type, where you are talking about research you can have many complications that develop in the course of

the research. In fact, you can almost expect that they will develop. It was probably a rash idea to say that this should be done in three years, which was the original proposal...in retrospect “no way.”

One big problem that was neither avoidable nor foreseeable was a kind of a joke: the demographers began to find out that the populations in the experimental and control communities were unstable—there was lot of movement in and out of the communities. They couldn't figure out what in the world was going on until they suddenly woke up to the fact that the men were literally “all going fishing” down on the coast, after the first couple of years. So, they left, went down there and fished for two or three years and came back again; it really loused up the statistics to a fare thee well and they had to make all kinds of adjustments to accommodate that! And, of course, they were never able fully to accommodate for it and the result was another problem with the statistics of the study. As a result of that, and it is recorded in the report... other people shouldn't make the same mistake. It was not just fishing for fun but commercial... the idea being is “that's how they fed themselves!” The importance of fishing as a means of providing good protein for the Ghanaian population, in fact, cannot be underestimated; it was of major importance and these people were just doing what they normally do; but our cultural/anthropological studies in the beginning just somehow missed that point!

Q: What do you think are the main benefits; did we get sufficient benefits to justify the $6.0 million investment?

PRINCE: I feel that we not only derived benefits that led us to be able to support the original contention but that they were sufficiently definitive to stimulate the whole concept of integrated maternal/child health and family planning programs in progressive African circles, and even in many places around the world. Obviously, these results were appropriate to the considerable U.S. taxpayer investment.

Q: Were these benefits really stimulated by this program?

PRINCE: Oh, yes, sure. The paper is quoted all the time, and if you ask Dr. Mahler who was Director-General of WHO at the time where some of these ideas that led to family health care came from, he would say, “You know perfectly well, Dr. Prince, we stole it from you,” from us, “you” meaning the whole of Ghana. He said that “there was no question that the work in Ghana was fundamental in supporting some of the basic ideas that went into the concept of primary health care.”

Q: How was that specifically; what did the Ghana experience demonstrate?

PRINCE: Because we included in the whole project these other projects that I'll tell you about in a minute. It wasn't looked at as a separate isolated effort to establish satisfactory decentralized/generalized health programs in a country that didn't have one previously. Because one of the problems with Ghana, and just about everybody else in Africa and in the developing world, was that historically, they had never had decentralized/generalized health services; they were always curative medicine oriented. It took a great effort to change that around to the true approach to an adequate emphasis on the preventive/ promotive health component of the program, in other words the “decentralized and generalized” part, and to be sure that these people in the rural and isolated parts of the country nevertheless had qualitatively and quantitatively adequate health services—the decentralized component. Those two concepts were part and parcel of the Danfa effort and of all the other HPN work we did in Ghana.

Q: Were there both technical learnings from the project as well as organizational or administrative lessons that were useful to people?

PRINCE: Yes. It was clear that the use, for example, of locally trained midwives - traditional birth attendants (TBAs) - was very effective in promoting the maternal and child health component of the program and, specifically the reduction in infant and childhood mortality and reduction in female morbidity and mortality from pregnancy. The use of various kinds of health educational techniques was also very helpful in laying out some of

the problems, so mothers in the village could understand them. For example, the family health aides were part of the project in the outreach component to the villages within the health center catchment area, if you can call it that, of the Danfa Health Center. There were many villages where people couldn't get to the health center easily so we found out that the only way to handle this problem was to have an outreach component of the Danfa Health Center's activities. So this was established, and the effect on providing services to rural communities that were in the “water shed” of the Danfa project was very important. That kind of action was based on a simple but logical kind of approach... everybody thought this would be true; but to really show that it would work as well as it did was very important; and it had a major influence on establishing this concept of outreach. The general idea about how far people will go, or can go, since illnesses may seriously restrict their mobility, to really have access to good health services was therefore important to determine within some degree of accuracy. So this became part of the project objective. The answer was - no more than 5 kms! in this (the average) type of Danfa-area terrain and available transport.

Q: Eventually this was adopted by the Ministry of Health?

PRINCE: From what we determined, as just noted, this particular kind of “friction of space” still constitutes a major obstacle to establishment of truly accessible decentralized/ generalized health services. In Ghana, or almost any other developing country's rural areas. And I don't know of any specific plans that the Ghana MOH or any other MOH in the African diaspora has been able to develop to solve the problem. The obvious fiscal and logistic parameters are almost overwhelming at present. It appears to me that the very recent suggestions and technical developments in the communications and computerized information systems may be the only answer. However, one runs into the usual African problem of adequate and reliable supplies of electrical power. Solar powered units may be the ultimate answer.

I know that this sort of distance teaching and/or service delivery system has been discussed for a long time. But the fiscal and related problems remain daunting for the foreseeable future. However, the Ghana MOH has, I understand, begun to “nibble at the edges” of the problem by increasing efficiency of its health services and, indirectly, of their accessibility.

Other Health Projects in Ghana

PRINCE: Well, what happened before we got to the point of adoption of the whole idea by the Ministry of Health [MOH] was that we had to assist them in two major areas, namely, organizational development and planning... the two go together of course. This led to a project which was called Management of Rural Health Services and, in the beginning, the idea was to emphasize the management part of organizational development; but the Government decided that really the thing that was at fault was the lack of an adequate mechanism, to plan health services not only from the point of view of the health services themselves but also in their relationships to the overall development efforts and constraints in the country. You remember there was an effort made in another project calleDevelopment of Integrated Planning and Rural Development (DIPRUD) and it didn't work because the Government didn't have an adequate financial basis, hadn't planned for adequate financial support for the rural development of the area which was near Tamale, if I'm not mistaken, in the Northern Region. This led, among other things, to the conclusion that planning was a more important part of management of rural health services than management per se, at least, to start with.

The result of this conclusion was that the Government felt it should have a National Health Planning Unit (NHPU). We went along with that because we felt it was our part to follow the lead of the Government in the ideas that were considered by the Government to be appropriate for the development of the health program in Ghana, and not to be imposing ideas from the outside. Sure enough it worked out fine and one of the things that was so important about the creation of the NHPU was the fact that the contractor - Kaiser

Foundation International Health Division - decided at the very beginning that they didn't want to make the mistake of imposing this idea on the districts and provinces and regions of the country. So, they were all involved in what they called “operation dialogue” in the very beginning, before the Unit was established and before the whole concept of how it was to be established, and what its function was to be. They had these meetings with people all over the country and, of course, starting with the Ministry of Health. This, I think, established the philosophy that was so important, of true participation and decision-making about what was to be included in the project, on the part of every body who was going to be responsible for implementing it. So the people who were implementing it couldn't say, didn't want to say, that they didn't want to have anything to do with the project since they were not involved in its planning. Quite the opposite! They all thought it was “our” project, meaning, of course, their project.

This was another characteristic of the whole business in the Danfa and following projects. They were all done with the idea that the Ghanaians who were involved in running the project, would feel that those projects belonged to them and not to somebody else. They had an ownership; “title guarantee,” that those projects belonged to them. And they were also responsible for publishing the results; so they had official recognition as the technical leaders of these projects in refereed journals, where appropriate, as well as being recognized as the people who designed the project from the beginning: that was the philosophy that we pursued throughout the entire experience in Ghana. And as I pointed out in the paper on “Sustainability” of these projects, I think this was the most important factor, if you can say that there was any one most important factor, that led to their sustainability. (See Annexes 19 and 20)

The next thing that was decided was that if the Planning Unit was to be effective and the management programs could be developed it would be necessary to train the people who would be leading the project. The health projects in the Governmental Units that would have primary responsibility, because it was clear that the Ministry of Health in Accra wasn't going to be able to run the whole health program for the whole country. It had to

be decentralized; (obviously, part of the “decentralized/generalized” conceptualization) Decentralization to the district level had already been established by government decree around 1974. It was therefore logical to assume that it would be appropriate to decentralize health program leadership to the district level, as well.

In order effectively to do that, it was felt it would be necessary to post a physician trained as a public health administrator to head up the district level effort to run the decentralized health program. And efforts were then established to secure the participation of the Medical School and the Planning Bureau and every body who could possibly be involved in setting up this kind of program. We discovered that the Medical School didn't have a curriculum properly suited to this requirement. So, with the help of the Overseas Development Agency of the UK and its operating health arm...the West African Health Secretariat, under the leadership of Dr Nicholas de Hesse, the Executive Director of the Secretariat, they were able to provide the University of Ghana Medical School, Department of Preventive Medicine and Community Health with a “ready-made” curriculum for public health specialists. Establishment of this curriculum became one of the objectives of the Community Health Team Support project - CHETS. Annex 21 must be read for full appreciation of the detailed way in which the decentralization of the health program in Ghana was implemented.

To sum up the basic philosophy of the CHETS project: it was clear that there had to be a health management focus at the district levels, run by a fully qualified public health physician, and a management team. Ideally, this was the way it should be done. This management team, which we called the District Health Management Team (DHMT), would include all the disciplines that would be necessary for a properly run public health generalized health program, i.e., public health nurses, sanitarians, health educators, etc. along with the Public Health Physician in charge. They would then work closely with the communities that were within the District and hopefully, in time, they would be able to convince the communities that they ought to have public health committees which could be represented at meetings at the district level to discuss, a possible plan for providing

health services to the district. The budget that was involved... would then be passed on up the line through the regional level to the central level. In that way, the Ministry of Economic Planning would get involved, because they would have some confidence in the validity and value of the budgetary estimates that were coming down from the Districts and Regions. The way it was before, they felt that these were not very well worked out and had too much emphasis on curative services, just as I was saying earlier, whereas this system, of having a well qualified person and a team working on the matter, with the local communities and at the district level was the way to get it done properly. Consequently that project... the CHETS project... was sort of the cap to the whole idea of the real establishment of an organized program for providing primary care health services to the people of Ghana. In my opinion we all had a great deal to learn from experiences in other countries and that's what led us to these conclusions.

And I particularly refer to experiences in the United States and within that, my own State, New York State, because, in 1913, New York was pretty much in the same condition as Ghana. They didn't have any well organized way of transmitting health services, either authority or responsibility, from Albany the capital of the state, to the towns and counties around the state. And it was a disorganized program. When, in 1923, Dr. Herman Biggs was made Commissioner of Health for the State of New York, he saw this problem and decided it could be settled in very much the same way that we did in Ghana... District Health Departments and District State Health Officers. He also set up the requirement that the District Health Officer would have to be a physician with a Master's Degree in Public Health; how about that for way back then?!

This was followed, up to the present time, except that in addition to decentralizing to the districts, it was shown through a demonstration project, under the aegis of the Kellogg Foundation in 1934, that an even better way to handle it was to decentralize the services to county level, because in a state as large as New York, the counties are also quite large. The levels were set, population-wise and funding-wise, at an absolute minimum requirement for establishing a county health department in any county. There were some

counties, however, that did not have a big enough tax base, and, therefore, had to be combined. This was discussed in a famous paper by Haven Emerson, a great public health physician in the United States, in 1945, for the American Medical Association. It's entitled “Local Health Units for the Nation” and led to the codification of the whole idea of the district and county health departments which we found to be applicable in Ethiopia, where the administrator I told you about earlier had been to the United States studying for his Master's at the Maxwell Institute of Public Administration in Syracuse, New York and gotten the idea from them. And again in Washington, Dr. Mahler told me much, much later (1989/90) at a meeting of the National Council on International Health that the main ideas re District Health Services had come from us. (See next chapter for more details).

Exchanges with Dr. Mahler, Director-General of WHO

Q: You were talking about Dr. Mahler?

PRINCE: Okay, we can go on with that; however, there is one more project that I haven't mentioned yet; the key project to the whole thing.

In 1987, WHO called an international meeting in Harare, Zimbabwe entitled “Strengthening of District Health Services.” I didn't realize that this sort of effort was going on... and, purely by accident, I ran across Russ Morgan back here one day in the spring of 1987.

Q: Who was he?

PRINCE: He was the Executive Director of the National Council for International Health (NCIH) at the time. He's a public health physician like me. He was very interested in this meeting that was going on in Harare and he was going to it. I said, “Will you possibly be able to get me a copy of the program?” So he went and he did. It was absolutely fantastic. They had the whole layout of the district health services just the way we set them up in Ghana. The people who came to the meeting were from all over the world...(Annex 8) not every country by a long shot of course. But a number of Ministers of Health came, or

they sent their top representatives. This set the tone, I guess, for the subsequent constant emphasis in WHO on the establishment of the district as the logical decentralization target for decentralized/generalized health services within the PHC system any where in the world in which government functions can be decentralized to that or similar levels. It is my feeling that the programs in New York and in Ghana helped convince Dr. Mahler and his staff that this was in fact the best approach to solving the problem of how in the world you decentralize/generalized health services in such a way that they can be effective at governmental units which are of sufficient size, and yet small enough to be really decentralized, in any country and, particularly, like the African ones where places are not that easily accessible: you have, as noted above, communications difficulties, etc. The Zimbabwe Conference, therefore, was of major importance.

Q: You were talking about Dr. Mahler talking to you about this?

PRINCE: Yes, in 1990/91 at the NCIH conference, he told me... (we were standing out in the lobby of the Crystal City Hyatt, and Russ Morgan came over and told me that Dr. Mahler wanted to talk to me) so I went over...and he said, “I'm going to give the key note speech for this session (which was the opening session) but I want you to know that I know where some of these ideas came from.” I thanked him very much but I said these ideas belong to the world; they're neither mine nor anybody else's; they belong to everybody. I'm sure that the people who originated them like, Herman Biggs, would want it that way. He said, “You're absolutely right.” So I don't claim any ownership to them. But I do feel that it is a felicitous description of the way in which the problems that the world faces;... God knows there are plenty of them... some of these are amenable to well-founded solutions that have been generated by careful thinking and practice on the part of qualified professionals. That's something that really needs to get into the world's psyche because it means that people have to concentrate on trying to improve levels of education in all countries so that every country is able to train its own professionals to be able to generate a critical mass of independent thinking and study and come up with solutions to these problems. The real basic problem is that difficulties of these kinds don't have

simple solutions as Abraham David said in Ghana while directing the University of Ghana program for training the leaders of the country and other countries to an understanding of complexity of the population problem and its interconnections. The title of his talk was very simple, “There are No Simple Answers to Complex Questions.” This is a complex question so there are no simple answers to it either! Our answer in Ghana was far from simple but it was, as it turned out, quite straightforward and logical when you looked at it in terms of the detailed nature of the problem, the epidemiology of the diseases that affect the country and the lack of communications and all these other things that I have already mentioned, especially, the lack of trained personnel.

The lack of trained personnel brings me to the last of the projects. You can't solve the problem of decentralized/generalized health services just with having a District Medical Officer of Health at the district level. He has to have staff, including the kinds of people that I have mentioned when we were talking about the District Health Management Team. But these need not be, and can't be, in fact, in most developing countries.. and now I think we are coming to the problem here in the United States, even here...can't all be fully qualified professionals but more appropriately what are called paraprofessionals - people like health officers, community nurses, and sanitarians in Ethiopia or Medex qualified medical assistants in the terminology that Dr. Dick Smith developed as a result of his experience in Vietnam and application of this concept to Hawaii at the University of Hawaii Medical School, School of Public Health, and in developing countries in Africa, where it is very appropriate. The only thing was, and is, that these kinds of people need to be trained around the concept of the generalizability of health services that they should deliver, not being limited only to working in doctor's offices, to treat patients or to separate out those that need more detailed treatment from those that don't, but also to include the concept of the community public health concerns. And, of course, now, with the advent of HIV/AIDS [Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome] and the resurgence of tuberculosis, this has become even more important.

In 1969/70 we began thinking about this in Washington and it led us to the feeling that we might try and secure active support of the Association of Medical Schools in Africa in solving this problem. Again we fought very much against the notion of importing something in Africa instead of having it developed from within the African medical and health fraternity. That's what led to the conference on The Teaching and Practice of Family Health, which is really about generalized health services including family planning. The leader of that project was none other than Professor Joe Lutwama, the Dean of the Makerere Medical College in Uganda. And he was also the President of the Association of Medical Schools in Africa (AMSA). My entre' to AMSA was through Dr. Van Zyle Hyde, as noted earlier, and our visit to Cameroon at the meeting of AMSA to authorize the follow-on seminars to the Kampala conference in different parts of Africa. All this led to the conclusion that, indeed, the African countries needed to set up programs for the training of these kinds of people. The way the Kampala conference came out was that the training in these seminars should be primarily targeted at the physicians; but it was concluded as a result of the follow-on seminars themselves that that was the wrong thing to do. And we had instead to concentrate on paraprofessional personnel; and this meant health officers, nurses, traditional birth attendants, nursing assistants, nursing aides; all these people who really carry the burden in most developing countries in providing the decentralized first contact health services that are required by a properly developed primary health care program.

African Health Training Institutions Project

That was what led to the fifth project in Ghana called the “African Health Training Institutions” project, otherwise known as AHTIP. Again the University of North Carolina was the primary contractor on this project and, under the leadership of the really talented and capable late Dr. Ray Isely, it was fantastically successful. They were able to establish in Ghana and many other countries in Africa a program using self-instructional materials, (SIMS), to short cut the complexities of getting the necessary teaching materials

established and at a cost and of a type that would fit the local situation and not be prepared somewhere outside Ghana, either in the UK or the United States. The UK has been very interested in the development of these kinds of materials, for many years, in a project called Technical Assistance at Low Cost [TALC]. Maurice King has been primarily responsible for it in the UK and it has been very effective but it still may not do as well as the SIMS idea because with SIMS the work papers are established and written in the host country by qualified professionals, and appropriate paraprofessionals are intimately involved in the development of the project and all the written materials.

Another aspect of this project was the fact that there were local coordinators and liaison people in Ghana who went around to the different places where the training was going on to help with organizing the actual training course based on these self-instructional materials. It was true, however, that the materials had to be reproduced in large numbers and the Ghanaians weren't able to do this, neither were the other countries, so they had to set up a production unit in Kenya. This was the only weak part of the thing. I don't know how that has been dealt with but, obviously, to be truly meaningful in terms of the original concept the self-instructional materials had to be produced in the country were they were going to be used, not in some other place. I don't know how they are going to get around this problem. But otherwise the concept worked out just great and again, I think we have the answer to the questions, because USAID seized on the idea and established a worldwide health training project called International Training in Health, INTRAH. And this project is still going on. The University of North Carolina Population Center took over that part of the AID-funded project for the whole of Africa and the Middle East. Consequently, it was not only sustainable in Ghana but to a degree sustainable all over the world; I don't know what more you could get. Two projects: the District Health Management Team project and the African Health Training Institutions project, in effect, became worldwide!

I have seen references to the notion that sustainability is not limited to the work in a single country but desirably leads to “spinoffs.” These are spinoffs to a fare-thee-well! As far I know, it has never been put down in a published document before. But I can attest to the

fact that this really happened in Ghana, and you can, too, and here we are. It works! If you keep after these things long enough and hard enough, they work!

If I was going to pass on lessons or ideas that would be a major component, why haven't I said anything about the population project? The reason was that it was not successful the way we organized it and for the reasons I have already given. So it was the only one of major projects that we financed in Ghana that was never sustained and had to be deobligated. It was true that the CHETS project was also deobligated but that was only because it was being implemented during the time when the political and economic situation in Ghana was of such a nature that we even had to discontinue our whole assistance program to the country temporarily. (And my latest advice - ~1991- from a Ghanaian Regional Health Director, who was here on a Hubert Humphrey scholarship, Dr. Delano Dovlo, is that all other Regions have fully qualified Health Directors and over 90% of all the Districts havDHMTs although fully qualified DHOs are still quite limited in number (about 9-10 when I last spoke to Dr. Dovlo.)

An Unsustained Population Project

Q: You said the population program was not successful because it was in the Ministry of Economic Planning?

PRINCE: Because it did not have the support of the people who were going to be implementing it. It did all the things that I said we shouldn't do; the whole idea was imported pretty much and it was not made any better in the host country because they compounded the problems by following the suggestions that were incorrect in the beginning.

Q: When they put it in that Ministry was it on the basis of the concept that population pervaded all aspects of development and therefore should be influencing the work all the ministries?

PRINCE: Right, and the money. It was thought that the money would be available from the Ministry of Economic Planning and probably not elsewhere.

Q: Were there any spinoffs from that project that proved to be useful?

PRINCE: Well, sure because it did include a major component in the procurement and distribution of contraceptives. And now this has become the tail wagging the dog, as it were, because of the fact that the health program in Ghana has already been pretty well organized and is moderately successful, at least at this stage of the game; thus, they already have the organizational health development upon which they can integrate more appropriately, the distribution of contraceptives project. So now it's possible to go for a concentrated contraceptive program because you have the fundamental framework of public health available to make this thing work.

Q: You also had various training programs for health workers in family planning? I thought they had a series of training programs at various levels funded out of that project.

PRINCE: Yes that's true, but there still was the problem of integrating the training programs with the Ministry of Health's overall health personnel training program. But the MOH really didn't have its heart in it.

Q: It also financed the support for the private family planning programs?

PRINCE: Yes, there is no question that the family planning, that “privatizing” family planning activities in developing countries has the desirable effect of separating government edicts from family planning activities and making sure that in effect the family planning is offered in a totally nonpolitical and non-coercive way. So if the people don't want to use it, they don't. The only trouble with that is that then the people who need it most are likely to stay away from the private organizations. You can't be sure that it will be very well run because...I told you what happened in Tunis..and that kind of failure to meet

the perceived needs of the local population. it is, of course, the “kiss of death” to any kind of program no matter what it is!

Q: Were there any other dimensions, then, of the Ghana effort and your role in it?

PRINCE: I can't say enough about the validity of the idea of passing the ball to the local professionals and then to the local para professionals and to the local government authorities to make these projects a success; any development project has to have the view that these things are their ideas and involve them to the point that nearly all we do is to help them with a few concepts in the beginning and help them elaborate these concepts into full scale programs by providing funds and technical cooperation in the more complex aspects of the work as they perceive the needs. Then stand back, turn the management of the game over to the local teams and their managers, and watch the game! (Well, why not? Any ball team needs a manager, and when the team's outside owners get into the local requirements of managing a given ball game, watch out! By the time the game's over, you may not even have a team.)

Philosophical Concepts in Public Health and the Question of Sustainability

I've just been involved in discussing some of these ideas with the people in Canada. I went to a meeting of the Canadian Society on International Health in Ottawa in December and the subject was “Investment in Health;” and much of the first part of the conference was devoted to a discussion of the World Bank's 1993 World Development Report, which is also called “Investment in Health.” But the second day was more interesting in a way because it dealt with: what are the philosophical concepts that might be involved as concomitants of the financial concepts of actual investments, i.e., financial development of a country by promoting its health programs thereby increasing availability of a healthy labor force and the quality of life and other things which lead to better financial and political stability, so that the whole country's existence is benefitted by a good health program.

It put me in mind of a paper I have just read by French sociologist Michel Crozier titled "The Ungovernance of Democracies." It sounds like a rather negative title but it turns out to be just the other way around. What he is saying is that we have gone through a "sea change" in the basic underpinnings of society in the past 20 years; big behemoth industries like the steel industry in the United States and in the Ruhr valley of Germany and other similar industries had all "bitten the dust" basically. And instead, it has become clear much of the industrial capability of a country and its consequent ability to provide a good quality of life for its people depends on knowledge; we are in the knowledge age. And the overall picture is one of a qualitative logic instead of a purely quantitative one. The only trouble is, the main trouble is, in fact, that the people who are leading the changeover from the old industrial age to the age of knowledge, are "prisoners of the old quantitative logic and can't break away from it and emphasize the importance of the qualitative logic," a problem which is seen most clearly in the development of the educational systems in the various countries so that the qualified people to run the kind of enterprises that now mean success, instead of failure, and provide happiness and quality of existence can, in fact, prosper. So he says we need to evolve this qualitative logic to replace the quantitative one that held true in the past. That's what I think we have been able to do with these projects in Ghana.

To me that is a terribly important conclusion because, if it is true, it means that similar approaches in other countries, especially developing countries could be very nicely connected with the concept of the qualitative logic and it would be seen, in fact, that the health component would be a major part of the whole idea. We are seeing it here in the United States in the huge interest in trying to deal with the problem of the uninsured population; "wow, the quality of their life is being effected by lack of health services and we can't have that!" We need to boost the quality of life of everybody in this country. Maybe this is one of the reverse flows of experience and knowledge from our work overseas that people tend to forget about. You don't realize that we have benefitted greatly from these experiences. For example, if we look at it from the purely technical point of view, we now

know that you can provide very important health services with people who have a high school education, if they are properly trained. This can obviate the problem of providing services for people who live in isolated communities because doctors won't go there to practice. But a health officer or a Medex trained type person would, or a nurse might be willing to work in such a situation, providing that there is a connection they have a viable connection with referral sources and capable professional they can go to when they need help. This is all part of the qualitative approach; that's a qualitative requirement not a quantitative one basically.

So I think Crozier is on the right track. If I have any conclusion from my 35 years in Africa that would be it!

The name of the report which I just mentioned which sets forth a most remarkable policy and strategy that the Government of Ghana adopted as a result of all the findings of all the projects that we helped them carry out which I have discussed in the previous part of the report was as follows: “Health Policy, National Health Advisory Committee Report,” April 1982, Government of Ghana, Ministry of Health. (Annex 22) This I have noted in the bibliography, which I got that title from, was the substance of an official document which I have a copy of which sets forth in great detail the whole concept of the implementation of decentralized/generalized health services, with marked emphasis on the public health and preventive medicine components of that generalized health service: all the way from the Ministerial headquarters to the health committees in the community organizations that are proposed under the strategy. It is well described in Figure One of the “Sustainability” paper and that's the one that I will discuss in detail at the NCIH meeting this June. The importance of the Government of Ghana having established this detailed strategy and policy for the implementation of primary health care programs in the country, of course, leap frogs over the Alma Ata (WHO) primary health care statement and even over the revised Riga, Latvia statement (WHO) ten years later in 1988. (Both were WHO meetings of major importance and international meetings.) And it also leap frogs the WHO sponsored international meeting I referred to before that was held in Harare, Zimbabwe

in 1987 on the “Strengthening of District Health Services” because most of the reports in that Harare meeting were recommendations that they do something like this. But Ghana had actually already done it or at least committed itself to the concept. And that's the extraordinary part about it!

I think that it is very appropriate to consider the way in which this happened and the importance of the establishment of this strategy and policy from the point of view of meeting the well-known-by-now requirements for being able to implement a primary health care program. I can't go into the details here except that they represent implementation of the concept of decentralized/generalized health services, and the establishment of district level government and district level specialization of the decentralized authority that goes with the responsibility for running the health service in the presence of a district health management team at that level, headed by a district medical officer of health. But by no means, and I emphasize that, limited to the District Medical Officer of Health but also including all of his staff as members of the District Health Management Team. And that means the nurses, sanitarians, health center superintendents, and whoever are appropriately on the staff of the District Health Department are members of that “DHMT,” which is what we used to call it and what Dr. Dovlo says it is still called in Ghana!

The organizational framework for really implementing the concept elaborated at Alma Ata and Riga should be established in Ghana, you know, if they actually put this strategy and policy statement into effect. What I don't know, because we never got a chance to go there to check it on the spot, is how widely this has been done. I get conflicting views about it. I've talked with a number of health people, doctors most of them, who have been in Ghana since this report was written and they feel that the philosophy and the strategy is in force and is being implemented but they all agree that it by no means covers all the districts in the country because there are some 120 districts now. It also depends on the training of the District Medical Officers of Health as specialists in Public Health and Preventive Medicine, which was envisaged, as you may recall, in the CHETS project, the Community Health Team Support project. The whole purpose of that project was to provide the training

that was needed to make it possible for the District to be staffed by qualified physicians with a public health background. Apparently, this part of the project suffered so much from the economic collapse in the early '80s that it was more or less discontinued or certainly not in philosophy but in fact because they didn't have enough students to train or enough money to train them properly. The result was that they were turning out very few DMOHs; so this could be a stumbling block in the whole thing. And what I don't know is to what extent that happened.

Characteristics of Decentralized/Generalized Health Services

Q: Maybe this would be a good point for you to summarize your view of what are the principal characteristics of a decentralized/generalized health service. You use the phrase a lot. You've given some impressions of it but maybe before we get through with the interview it would be useful to have your view of what you think are the key characteristics of such a system?

PRINCE: Sure and I may say that it didn't originate with me. But it did originate with my colleagues and my experience in the New York State Department of Health, going back all the way to 1913 when Dr. Herman Biggs took over control of the State Health Department, became Commissioner of Health in other words. In fact, I've brought with me a copy of McKinney's Consolidated Laws of the State of New York in which it describes what Dr. Biggs put into the public health law with the agreement, of course, of the Governor and the New York State Public Health Council in 1923. It is entitled, “Sanitary Districts, District State Health Officers, Public Health Nurses” and goes into details about how all these people and a lot of others were to be deployed in an effort to provide basic preventive and public health services for all the people of the State.

The point about the term “decentralized/generalized health services” is that it originated with this concept; in other words New York State had, one might say, almost from the beginning, the conviction that it was necessary for public health and preventive medicine

to constitute a major part of the services which were going to be provided by the State or with State assistance and encouragement to the local communities, along with the curative services; and that's where the term generalized health services comes from. It means combined preventive medicine, public health and curative measures.

You may wonder what I mean by the term “preventive medicine and public health.” The point of that is that “preventive medicine” is the application of medical practice for preventive purposes; the most obvious examples are, of course, immunizations; those come under the heading of preventive medicine. But it could also include things like the treatment of patients who have threatening cardiac conditions; that's preventive medicine too. So you see it goes into medical practice. Public health measures are those which require public action, cannot be effective without public action. The most obvious example of that is the provision of good water supplies and sewage disposal; these things are public action requirements that they have to have, in order to fund the program; and they have to have necessary legislation and sign contracts to get things done. They do not require, necessarily, medical participation. These are strictly public health measures and there are other types of public health measures too, of course, which include safety, control of the environment, etc; they are all common talking points today. Part of the argument about the whole reform of the United States Health system is the question of how much of the resources we have available should be devoted to these public health measures. So you can see that it is still a major question.

That, in general, is what I mean by “generalized...” and the decentralization means that the services are made available and accessible to the people who live in the far reaches of the country or the community as the case may be. And right now, for example, you'll find in the New York Times today an article about the fact that the big problem with health services as perceived by people living in midwestern communities on the plains for example, they can't get a doctor, there's no way they can get a doctor in a hurry; there isn't one within a hundred miles of some of the places where some of those people live. And so when they're in trouble they can't get a doctor unless he can fly in and this is leading to more

and more flying health services. But that's the ultimate aspect of decentralization; in most cases, it is not that complicated or that difficult. Under the best of possibilities, there would be nobody who would be so far away from access to reasonable medical care and preventive services that they couldn't get them for lack of personnel. That's where the decentralized comes in to the generalized; so the two by necessity must get together.

Q: So the "generalized" means general medical practice, preventive medicine, and public health practice, period.

PRINCE: Correct. So that's the somewhat complicated answer to your question. It is interesting to consider the fact that this idea only... that this idea was conceived and recognized as essential in the United States way back in 1913.

Q: How does this relate to the conflict we see in the United States and we see in a lot of developing countries and in Ghana where government resources and the Ministry of Health seem to be preoccupied with hospitals, major hospitals rather than with public health programs? It seemed to me that there was a major conflict between the two.

PRINCE: Exactly. It has been and again we can go back to the New York State experience because in 1946, they established with federal assistance (the Hill-Burton Act) a hospital construction control system which had its headquarters in Albany. You could not build a hospital in New York State without the approval of that Commission from that time on. It was done because of the very thing you mentioned; New York State was concerned about the over-investment of public and private funds in purely curative facilities; they recognized that in order for this policy, established a number of decades earlier, to be effective they had to maintain a balance between the curative and the preventive components of the total health service picture; otherwise the people would be short changed. The answer to the question therefore is that there has to be a policy and strategy about the construction, provision and delivery of curative services viz-a-viz the preventive medicine and public health services component of the generalized health services. And this thinking is part

of the policy and philosophy that is required to rationalize the way in which the health services are developed. One of things that worries me about the present situation in the United States is that I don't think there is anyone on the Presidential Committee making all these decisions... maybe one or two people at the most..who understand this. It's not something you just pick up “off the street.”

Q: Doesn't part of the decentralized/generalized approach carry with it the concept of a referral system, depending on the nature of the problem, the disease, the sickness or the casualty that there would be more and more sophisticated care as you went up the line?

PRINCE: Of course it does; absolutely. The assumption is that the plan will have to include provision for the referral of patients from more rural less curatively complex and sophisticated services to the level of services that is needed to treat patients with a certain condition. The best example of that is the whole question of obstetrics. The great majority of women here in the United States.. in my opinion and I know some doctors don't agree with me and in developing countries... the best place to make deliveries is in their home with expert care provided by the equivalent of a traditional birth attendant with training who has had adequate training or a fully qualified midwife. There are plenty of midwifery services delivered by organizations like the Frontier Nursing Service in the eastern part of Kentucky where they have no doctors or hospitals readily available. The nurses deliver babies in their homes. But when they get into a situation they can't handle, e.g. a breach delivery being the most common, there is a way for them to be able to evacuate the patient to a district hospital, let's say.

For example, the Red Bird Mission Hospital in Pike County Kentucky provides exactly those kinds of service; there, they have adequate services to handle a breach delivery safely, no problem in the great majority of such cases. By the way, I visited this hospital with the Ethiopian Vice Minister of Health, Yohannes Tseghe, in 1963. That's what you need in countries like Ethiopia and Ghana. To some extent they have these district hospitals but they're not properly organized within the framework that I mentioned to

function the way they ought to and that's one of the problems. It's not so easy to do with the communication the way it is, i.e. not so good, no roads sometimes and, no telephone, so that nobody can tell the hospital that they need help, an ambulance or whatever. When all these things are missing; something has to be provided to take their place. That's why “Red Bird” had interns on its staff who travel on rounds by Jeep every week or so to keep tabs on the patients at home in the Kentucky hills. (Yohannes loved this idea and he was royally feted with really good moonshine in some of the homes we visited!)

Q: You referred to a report?

PRINCE: I was referring to the report I made of the trip in Ghana and the second report I referred to was the “Health Policy and Strategy” paper in Ghana. And that's sufficient to cover the issues that I was talking about. Then I, of course, I also referred to the New York State background paper. Let me go now to a little bit; maybe I should put this at the end what I have to say because I am going to try to finish today.

Approach to Work in Developing Countries

There is a lot of additional background to what I have been saying about the way in which we need to approach our work with people in developing countries, as it relates to the kind of training and background we need among the people that we have in AID or in the State Department who would be engaged in working in enterprises of this kind. I want to put that in towards the end of the thing when I complete the discussion of what I did when I got back from Ghana.

It is important to realize that before I went to Ghana and while I was there, I visited and worked in some 24 different countries in Africa on AID supported technical cooperation projects. They had a similarity which speaks well for the durability of the philosophy that I have just expressed in that all of them attempted to deal with the universal problem of overemphasis on curative services and insufficient understanding of what was meant by the primary health care decisions made at Alma Ata in 1978. Also including making

sure that the concepts of the services to be delivered to the African people included the understanding of the importance of family health, child spacing, birth limitation where it appeared desirable and providing both the facilities and the information for the use of these mechanisms for child spacing and limitation for anybody who wanted it.

So the tendency was to create a kind of “template” upon which you could insert the different variables in each country and come up with an integrated generalized maternal and child health family planning approach which would fit the particular circumstances of the country concerned. It is, of course, ridiculous to assume that the details of how this is done are going to be the same in every country or in every part of the same country; obviously they are not. Countries have individual governments, individual personalities, individual geographies, individual histories, and all of these things have to be taken into consideration in the planning of such projects. But that's what I did in those 24 different countries and a lot of the work that we started in those days has continued in some kind of spin off or actual continuation of the projects right up to the present as far I can tell.

One of the countries that has really done itself proud both in terms of financial and organization approach to the problem is Botswana. One of the first projects I got involved in after returning to the United States was the work to improve the support given to the historically black colleges in this country by AID; most people think in terms of the Grey Amendment of 1984 buAID was way ahead of that because in 1969 at the urging of Bob Rupard who was then head of ID (Institutional Development) in the African Bureau and I told you about that. Well that project fell on fertile ground and, of course, the country has also done extremely well financially. The result is that much of what we have been talking about has been implemented. Stories in other countries are not as encouraging.

But I think overall the story is encouraging despite the rather negative view that appears in the World Bank Development Report for 1993 - “Investing in Health” because the statistics may not show as big an improvement as generally expected in infant and childhood mortality which is one of the favorite indices used to decide whether or not a program has

been successful in the health field. Admittedly, you have to be realistic about it. We're certainly interested in reducing infant and childhood mortality in what we do but if one emphasizes that objective too much one doesn't relate the possibility of accomplishing that objective down the line a ways, because the organizational development and the infrastructure and the philosophy necessary to achieve the objectives are built into the country's approach. What we have tried to do is that because we don't think there was any way we can provide all the funds necessary right away or all the personnel to be trained, etc. or all the training institutions to do this quickly. I think one of the problems is that everybody thinks it is going to happen in 10 years; it won't, it won't happen in twenty years, maybe 30 years, who knows. One has to take the long term view and not try and accomplish things that are unrealistic. But it is realistic to establish the philosophy, the practice and the strategy of the objectives that are to be achieved in the host country and that is what we have tried to do and I think we've been successful in many cases.

Q: You think that the philosophy that you have discussed in all these interviews way back to the New York State experience and in Ethiopia experience and so on is pretty well accepted and pervades most health situations, medical situations in Africa and worldwide in developing countries? And the issue now is something else?

PRINCE: That's right I think that is the issue. When you consider the fact that before this happened they had no such philosophy and strategy; you could go to country after country and it was all the same: we've got to take the patient to the hospital in Basangua, 100 miles from here in CAR [Central African Republic], for example. The idea of setting up decentralized/generalized health services in CAR was a total enigma to the people there when I arrived in 1978. And yet they were able to understand the significance of this approach and so they went ahead and began work on it. I don't know how far they've gotten but it certainly seemed to fall on receptive ears. Other cases are much more advanced, like Tunisia, Morocco, and Kenya. Kenya is particularly so; Tanzania and Zimbabwe, and I have mentioned Botswana and many others that have been very advanced in their thinking in their approach to this problem. I do, in fact, think what we

started in Ethiopia, (and I really believe we started it as far as the Africans are concerned, in Ethiopia and set the example of what could be done along these lines) has been remarkable. It has been an idea whose time has come and it has spread like wild fire all over Africa and all over the world. WHO has had an absolutely major part in doing this. And, of course, the meeting in Zimbabwe was the kick off and the Director-General Dr. Mahler said so at the time; I have his document here and it is very clear that he had in mind that this would be a worldwide phenomenon as the delegates at Alma Ata wanted it to be - a worldwide effort to improve the level of health and the quality of life of people all over.

Dr. Mahler's Statement at Harare, Zimbabwe

I would just like to read a few paragraphs from Dr. Mahler's statement introducing the famous international “Interregional Meeting on Strengthening District Health Systems” which was held in Harare, Zimbabwe from the 3-7th of August 1987. I have the actual transcript of the meeting here. It should be available from WHO headquarters and from PAHO here in Washington. Dr. Mahler started as follows:

“I should like in the first place to thank the Government of Zimbabwe for hosting this important interregional meeting which is the first of its kind devoted almost exclusively to issues of health development in districts. In every liberation struggle (liberation from disease is what he was talking about) there comes a time to reexamine tactics, redefine targets and take stock of the ability of the troops to achieve the final victory.

(And he points out that it will take a long time.)

“Even where commitments to achieving the final objective are total and the moral values... the very nature of the struggle itself, the hard grinding slog year after year and the difficulty to demonstrate that the war is being won on every front despite the unmistakable pointers of only periodic gain; all of these whittle away at the determination to win. It is my judgement that in the struggle in which all of us here today are active combatants;

the struggle to liberate mankind from the burden of unnecessary ill health has reached that inevitable phase when we must remobilize for the final push towards health for all. (which was of course the objective of the Alma Ata conference: “Health for All by the Year 2000.”)”

“It is not by accident that I make these remarks here in Zimbabwe; I make them precisely because we are in Zimbabwe and because we can all be inspired by the example of our host whose experience has been demonstrated for the world that the long drawn out fight for liberation can be won in the face of the established status quo and a constant undermining and misrepresentation of the moral basis for the struggle.”

(And then there is a heading; “Ten years since Alma Ata.”)

“During the last fifty years or so individual countries and WHO have become increasingly aware of the deficiencies of the health strategies that they have been employing.”

(This comes right to the health strategy that was established by the Ethiopian/Ghana program)

“These have sometimes been based on erroneous concepts: One concept is that associated with the idea of “Centers of Excellence” whose effect contrary to the rhetoric manifestly failed to trickle down to the rest of the system. Another concept adopted in the '50s and early '60s is the tackling of single communicable diseases by means of time limited vertical campaigns that were inordinately expensive and failed to tackle the wide range of health needs felt by the people.”

(Of course the prime example of that was so called malaria eradication, which didn't get to first base.)

Even the technocratic strategy of basic health services of the late '60s and early '70s proved to be an insufficient response.

Q: Would you include the smallpox campaign in that?

PRINCE: This was the one vertical campaign that was 100 percent successful. I have to admit that I didn't think it was possible because I was suspicious that the virus had other unknown reservoirs, but it didn't and it was possible. The Herculean efforts that were undertaken to get to the last case of small pox, in Somalia in 1975, had to be seen to be believed because it was something of such historic and epidemiologic significance, at the same time, so unlikely. But I have to admit, with great joy, that it was surely justified.

Q: What were the particular characteristic of smallpox that made that possible whereas malaria and many other tropical diseases have resisted all efforts at their eradication?

PRINCE: It had only one host, the human, and the vaccine was 100 percent effective. There is no other disease like that. With that combination the theory would be that if you could vaccinate everybody who had the disease or who was exposed to the disease, you would have 70-80 percent of the human population of the world immune against the disease. And we know from experience that you can never have an epidemic if your population is 70/80 percent immune and if the immunity is complete. The theoretical medical basis for carrying it out was sound but the logistics were a nightmare. I have to hand it to Professor D.A. Henderson because he was the spark plug behind the whole thing and Director of the WHO office which spearheaded the project. Later, he became Dean of the School of Public Health at Hopkins, which seemed very appropriate as he had just carried out such a brilliant “tour de force” in communicable disease control.

Back to Dr. Mahler's statement:

“In many developing countries the ratio of health expenditure to Gross National Product is not even constant but declining. But the ravages of inflation and population growth erode the real expenditure on health per capita. In such a critical situation the need to use every cent effectively becomes a critical necessity. But (there is that word “district”

again), precisely because of weak organizations and lethargic management in districts, we see great wastage of available resources and a failure to mobilize and utilize potential resources such as the efforts of the people themselves on their own behalf."

"Poor horizontal management of a broad range of primary health programs in districts often coexist with excellent vertical management of special programs resulting in the loss of opportunities to do more with the available resources. As if that were not enough, the impact on the morale of the front-line health workers in their health stations, health centers and district hospitals provoked by chronic neglect and poor conditions of service force us to raise the question whether many district systems are making any contribution at all to the health and well being of the people in their area."

(to skip a few paragraphs; he goes on to say:

"I am convinced that we know a great deal about what to do; we know that we must adopt the tactic of rehabilitating the building up of our district health systems.

(then he goes on to describe that and includes district health systems research to constantly seek out answers to problems that may be showing up. Then he describes the ways in which WHO can support all of this as follows:)

"I envisage WHO support through vigorous mobilization of additional human, technical, and financial resources for strengthening district health systems based on primary health care, " and adds that "the declaration of Alma Ata showed by the intention of the member states an intention to increasingly commit both their national and external health resources to the establishment of strong district health systems based on primary care. No word could match such a response to that nagging challenge which has pursued us all since the Declaration of Alma Ata. The challenge to put our money where our mouth is."

All I'm saying is to elaborate on my earlier comments about Dr. Mahler's remark at the NCIH meeting that I referred to. He placed a great store, it seemed to me, on the

knowledge that he got about what we were doing in Ghana and what we had done in Ethiopia which passed between us at that fateful 1975 meeting during a big banquet in Ghana in the palace, sponsored by the Peoples National Defense Committee (PNDC). This was Colonel Acheampong's government; it was at the banquet over coffee that I suggested to Dr. Mahler that he might be interested to know more about what we were doing in Ghana and what the Ghanaians were considering, because by that time they had in mind the basics for this strategy and policy. He seemed to be fascinated by it; it may have played a part in his thinking in view of what he told me at the NCIH meeting. He certainly showed a great interest in it. So these things do perhaps have a kind of sustainability that is quite different from what is usually attributed to the term which is that a specific project continues after the funding has been withdrawn. And if it doesn't then it hasn't been sustainable. But the long range effect of projects, may be of prime significance, and not necessarily in the same country where it was originated but in other countries and, as I said, around the world as may be the case here, and was clearly the case with the African Health Training Institutions project, which became the “template” for the worldwide AID-sponsored International Health Training project.

Q: You are referring to the sustainability of the philosophy, concepts and practices even if a particular project did not continue?

PRINCE: Exactly. And after all it is no different in developing countries than it is in the United States where, for example, the ideas that we had in New York State in 1923 and the years after that, have indeed proved sustainable and have been adapted as well in various State Health Departments all over the country. But there is still a great deal of work to be done actually to provide the services envisioned in the concept and consequently you might say that “the project” wasn't sustainable. But, according to our definition in the paper we have submitted for consideration by a refereed journal, it is, or will perhaps be, the only one in the literature which places sufficient emphasis on the importance of the underlying philosophy of the “qualitative logic” that must also be sustained, because if you don't have that underlying basic philosophy you can't have the quality services, let's

face it that are required. So you have to have the concept established and ready to be implemented when the time is right.

Return to the United States in 1977

Now we are back in this country, February 1977. The first thing that happened when I set foot back here was a call from APHA... saying that they would like me to serve as a consultant for them.

Q: You had retired from AID at that point?

PRINCE: Yes, I retired at post on December 31, 1976; I hurt my back lifting boxes for shipment and was laid up totally for several weeks and then evacuated “en famille” of course.. And within a few days I was attending a meeting of WHO/PAHO/AID on the control of endemic diseases. The purpose of the meeting was to deal specifically with control of Schisto, Tryps, and Oncho (Schistosomiasis, Trypanosomiasis, and Onchocerciasis). Malaria was omitted, for example, because that's another whole story.

Maury Brown, then Chief of the Development Information Division of the AID Center for Development Information and Evaluation (CDIE) had asked APHA if they had someone who could help with the establishment of a computerized memory for AID projects. They apparently came up with my name and as a result I was over here in Rosslyn Plaza within a few weeks of my return to Washington talking to him. He explained what it was and it sounded very interesting to me because I had already begun to wonder how AID was going to catalogue and archive all of the work they had done over the previous twenty years or so. I took the job, which was to write short summaries of all the projects that were going to be put into the computer and then establish a system of key words to access the computerized information. Unfortunately, and I was pretty upset about it. I was told “...don't take any projects that were not in existence in 1974; don't go back any further than that.” I said, “Hey, hold on a second. I know a lot of projects that were very important that were finished in 1974 and done with. Are they going to be discarded? I don't see the reason

for that if you really want to establish an archive on how AID thinking led to changes, presumably in status and benefits in developing countries. For that, you have to go back to the beginning of our efforts! They said we can't because the computer is not powerful enough to take all that information. The result was that most of the pre-1974 projects never got into the computer. However, with everybody's tacit approval, I went down to talk with Mrs. Pope and asked whether she couldn't bring the Ethiopia D&E project into the system and if she did I would write the key words and summaries. As a result, it is in the system; but it is the only one of all those early projects that got into it, and as a result, we don't have a properly catalogued history of the seminal work that Technical Cooperation Administration, Foreign Operations Administration and the International Cooperation Administration did in the early days. I don't know if anything can be done about that at this stage of the game. It's too bad.

Some of it is dealt with in the paper I wrote on behalf of the Office of Health in AID just a couple of years ago, entitled “A History of AID Research”. I don't know whether it has been put into the archives, but it is available. And that covers right back to the very beginning, even before ICA, starting with the Institute of Inter-American Affairs in the late 1940s.

I finished that project and, lo and behold, a request came for me to return to Ghana and head up a team to write up a project paper for the Community Health Team projec(CHETS). I went back to my “old haunts” and it was great, absolutely fascinating. We put together the project paper in a relatively short period of time but then there was quite some uncertainty in the government and in the Medical School and in the Ministry of Health about whether they wanted to do it. So it took some strong persuasion on the part of Dean Harold Phillips of the UGMS at a meeting that I will never forget that we held in his home, sometime in March of 1979, in which he succeeded in convincing everybody present that the proposal should be approved. And then we all went and had dinner at the Chinese restaurant down on the ocean and sealed the agreement there with hand shakes and what not. And that's how the CHETS project was born!

The team that I worked with to write the project paper was wonderfully well chosen by the contractor, because we had an excellent sociologist and a health educator as members. They understood the need to sell this idea to the Ministry because it was quite a departure from what had been going on before, even in our previous projects: the idea of training physicians to become district medical officers of health at a specialist level and the involvement of the West African Health Secretariat was something to accomplish!

It was all done and again when I got back here I had an early appointment with APHA to assist in laying down guidelines for integration of malaria control. The word control was then beginning to be used with respect to the problem of malaria in the primary health care services because this was going to be essential. We knew that malaria wasn't going to be eradicated; it was going to be around for a long time, so there was no sense in having “vertical” programs to control that any more. This meeting was held in APHA headquarters. Dr. Susie Kessler, Director of the International Health Division of APHA, was the chair, and she did a very good job of master minding the whole business.

And then I undertook to work with a contracting firm, Pacific Consultants, Inc. again in implementing the concept which was one of the ones we had developed in ID (Africa Bureau, Office of Institutional Development) in the days when I got back from Ethiopia, with Jean Pinder, on improving health education in developing countries. That got changed around to improving the education of health personnel and led to the Conference on the Teaching and Practice of Family Health that I mentioned earlier. As already explained, that led to this idea of training of physicians for the practice of family health and the internationalization of that program and as noted. I went to several countries for that purpose in 1970-71.

The next thing was to do a similar project with Pacific [consultants] in Botswana to involve the work and training of the nurses and midwives in that country in a more generalized

PHC program. When the RFP came out we didn't win but I had a lot to do with planning the approach in Botswana, which was used in implementing the project later on.

And the same thing happened in Somalia - an assignment I had as a full time employee with Pacific Consultants in the beginning... That's not important except to demonstrate the fact that all of these things were related to the basic principles that we laid down in the previous programs in Africa in the '50s. In addition, of great weight with respect to “Sustain” is the fact that the Botswana project was evaluated through an HBCU/Research Grant Program project with Tennessee State University in the period from 1986-90. It was found to have produced highly sustainable improvements in maternal and child health programs in that country even though there was one glaring weakness - the absence of any well-focused program for post-natal care of infants! Boy oh boy! I felt stupid. I should have picked that up myself. I'll never do that again!

Other Illnesses Emerging in Developing Countries

(See Annex 23. “An Annotated History of Some AID-Supported Health Research Activities Worldwide.” Compiled by J.S. Prince M.D., D.P.H. International Science and Technology Institute, May 1993; and “The Role of AID In Health Research Worldwide - Draft Final Report.” A.A. Buck, K. Amman-Buck, Tropical Epidemiology Consultants, 1990)

One other category of illnesses that had not been dealt with in any of the work that I had done previously was that related to noncommunicable diseases. There had been a feeling that noncommunicable diseases were unimportant, relatively speaking, in developing countries. That has turned out not to be so, as most people know by now; since hypertension, cardiovascular disease, and related illnesses are rampant in developing countries. The reasons are very complex and I won't go into them. Suffice it to say that I have been heavily involved not only in writing about this problem but in attending meetings in developing countries, the latest of which was the meeting in Yaounde, Cameroon, in June 1993 of the International Society on Hypertension in Blacks (ISHIB) and the

PanAfrican Cardiology Society where we discussed a lot of these issues and came up with some ideas on how to deal with them. But this is going to be a big new area and even though AIDS has taken front and center for obvious reasons, this other epidemic is “lurking in the wings” and ready to “pounce,” the minute we get HIV/AIDS under control, which we will one of these days! Consequently, I think it behooves everybody working in this field to realize that they are going to have to deal with the problem of noncommunicable illnesses, sooner or later, in all of the world and not just in the developed countries.

Q: What are these illnesses; you mentioned hypertension, but what are some of the others that you think are standing offstage ready to pounce on the world society?

PRINCE: The biggest problems are going to be those which relate to the whole area of cardiovascular diseases (CVD), meaning heart and blood vessel diseases and the diseases which affect so-called “target organs” like the liver, kidneys and the lungs, not to mention the blood vessels, all over the body, and the brain. In fact, the biggest side effect of hypertensive CVD is stroke - a problem of the blood vessels of the brain which are affected in the same way as the blood vessels in the heart, or by the lodging of blood clots originating in and pumped by the heart due to plaques on the blood vessels of the heart which break loose and get blown into the general circulation and end up in the brain capillaries and stick there and cause emboli which block circulation in the brain. That general category of CVD and diseases of target organs... that's the number one problem!

Dr. Grant's Philosophy

So you know, having gone through this fantastic experience of 35 years of working in Africa, and 10 years before that, working in New York State - all of it in public health and preventive medicine - I could be pardoned in saying that there must be a basic philosophy for all this. This was very well stated by someone who I met several years before I left New York State to discuss the work I was doing on evaluating the effects of health measures in the State. He was then the Medical Director of the Kellogg Foundation in New York

City (now deceased); his name was John B. Grant. And I am quoting from a book entitled “Health Care for the Community: Selected Papers of Dr. John B. Grant.” And Dr. Grant, for most of us in public health, is sort of the great white father, the professor who has really thought up some of these ideas that we are talking about. This was from the paper he delivered at the All-India Health Institute in 1941, mind you, 55 years ago!

“It is universally acknowledged today that the immediate social problem is to overtake the lag between modern knowledge and its use in the setting of the community. The single outstanding and basic cause of this lag in the health field is the lack of scientific investigation of methods to apply the results of the growing body of scientific knowledge to society. All other factors become subsidiary to this and would automatically be removed by the successful undertaking of this essential step. The secondary causes of the lag are absence of a public opinion educated in the maintenance of their own health and the prevention of disease.”

(That's the same thing as “health promotion and diseasprevention.”)

“Inadequate economic considerations in planning of administration, lack of sound administrative procedures based upon the results of scientific investigation and finally the lack of personnel trained in community applications of the methodology resulting.”

Well, these are all the things that we have been talking about and here he was in 1943 predicting the whole business! And then he goes further to say in implementing these concepts:

“The physician has to be aware of the fact that he is operating in a community, with people and in a social system with emphasis on the social aspects of the system. And any contact between a doctor or public health nurse and a patient that does not, on the one hand, increase the health workers' knowledge of cultural attitudes relevant to health and, on the other hand, increase the patient's understanding of health and its relation to different ways

of thinking, feeling and behaving is to that extent a waste of time on both sides." (emphasis added)

Now with these admonitions in mind I have developed for myself a kind of philosophy of the kind of person that AID might seek to employ with the philosophy that AID should adopt in working in developing countries generally, and especially in the health field. With respect to the kind of person that AID should look for to work in such a field in these efforts to improve the quality of life of developing countries around the world: such a person first of all needs to have superior technical knowledge of the particular part of the health program he is going to be dealing with and I think that, perhaps, in this area, there is a tendency to underestimate the need for persons with professional training in medicine and public health. This is really essential if that person is going to be dealing with other members of the medical profession, whether they be in the ministries or in the field, in practice or whatever, as well as to deal with the kinds of problems that arise because he has to be able to convince the people of the host country that they can trust his clinical and public health judgement. In order to do that he has to have extensive training. I think that is a mosimportant point.

But, it is certainly not the only point that needs to be considered in looking for such people. I think that, if you follow Dr. Grant's postulates, and certainly my experience leads me to the same conclusion, it is desirable to have someone who has a pretty good knowledge of the social sciences and an ability to interpret the significance of local sociocultural conditions. And if you consider economics a social science, you, of course, would include economics, but I would include it anyway, whether it's looked at as a social science or something else. The knowledge and ability to understand the significance of the socioeconomic status in various communities in which we are trying to help the host country develop a program of some kind, is essential. And therefore such people should have an interdisciplinary, intersectoral background and understanding and experience in working in that kind of environment, ideally, before they are set loose on trying to solve

problems in the almost infinitely complex situations that they have to deal with in most developing countries.

On top of that they need a sense of history! I think a person who goes overseas needs to know something about the history of the country that he is going to be working in; hopefully he has had a chance to read up on some of it and understand the political significance of the history, in other words, a knowledge of the political science component of the history of the country so that he doesn't make serious errors in his relationships, especially to people in the governments of those countries. He also needs to have a good background of the Agency's history and philosophy and have somewhat the point of view of the foreign service officer, because anybody working in a developing country on behalf of the United States has to have, to some degree, a diplomatic background and approach to work in that kind of environment. And it seems to me of more than passing importance; it is, in fact, a matter of considerable importance.

We have had problems with people working on our teams at one time or another. And as head of a division for nine years in Ethiopia, I had plenty of opportunity to see that when we had people who did not have this sense of diplomacy and history, they did not make very good impressions; and it affected their usefulness in their job (See Annex 24 for a discussion of “The Medical Profession and Technical Assistance to Developing Nations.” J.S. Prince M.D. Dr. P.H. August 16, 1976. Reprinted from P&S Quarterly, Spring 1977, pp. 7-14. Copy attached to Oral History text.).Trying to fulfill this kind of a paradigm makes it difficult, I realize, to find appropriately qualified individuals to fill these positions. But I get the feeling that maybe the Agency hasn't been willing to put as much effort into finding such employees as seems justified. Also, in the tendency to contract out much of the work, they may have lost some leverage in picking the right kind of people for the job. I don't know whether this is true or not, but I think for our audience which would certainly be people in State as well as people in AID, they should know that there is at least one AID person who is a foreign service reserve officer and feels very strongly about the need for us to provide people in our technical cooperation jobs overseas who have these

characteristics, which are not so different from those of a foreign service officer. I approve of this and I appreciated my contacts with foreign service officers all through the time I was overseas; it was very instructive to me and I can congratulate them on the quality of the work they are doing. By and large, in addition, they proved very willing and capable “instructors” for one who was basically a neophyte in the area of international diplomacy!

Final Observation

There is a little book called The Care of the Patient (Harvard University Press, Cambridge, Mass. 1931 pps. 48) It was written way back in 1931. The author was Francis Wells Peabody, MD, Professor of Medicine at Harvard at the time. The last sentence in his book is absolutely terrific and, you know, it has been my motto ever since I started medical school in 1932. It was also the “Bible” of the Professor of Internal Medicine, who was the first person we had contact within a clinical specialty, the late Dr. Robert F. (Bobby) Loeb:

“One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is caring for the patient.”

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