

**United States Foreign Assistance
Oral History Program**

Foreign Affairs Oral History Collection

An Interview with

DR. VERNON C. JOHNSON

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Association for Diplomatic Studies and Training
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ASSOCIATION FOR DIPLOMATIC STUDIES AND TRAINING ORAL HISTORY COLLECTION

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The Association's Foreign Affairs Oral History Program was established in 1988 and is housed in the Lauinger Library of Georgetown University and at the Foreign Service Institute in Arlington, VA. The collection is comprised of oral histories taken from a number of projects, with the unifying factor that all concern the conduct of American foreign affairs and experiences of those employed in the field of diplomacy and consular affairs and their families.

The oral history collection includes interviews done under the auspices of the Foreign Service History Center of George Washington University, which was amalgamated into the Foreign Affairs Oral History Program, the Foreign Service Family Project, the Women Ambassadors' Project, the United States Information Agency Alumni Association Project, the Foreign Assistance (AID) Oral History Project, the Senior Officers' Project, the Labor Diplomacy Oral History Project and others.

The aim of the US Foreign Assistance Oral History Program, in particular, is to develop a collection of oral histories of those who have served USAID and predecessor agencies and those who have served in foreign assistance programs of associated organizations such as private firms, private voluntary organizations, and other US government agencies. The Center for Development Information and Evaluation (CDIE) of the USAID has made a grant to help finance the preparation of 120 oral histories.

For the most part these interviews are carried out by retired USAID personnel on a volunteer basis, directed by the Oral History Program. The interviews are unclassified, and unless so marked are available for use by researchers. Most of these interviews have been transcribed and then returned to the person interviewed for editing. The transcript is an edited version, and is not a word for word rendition of the cassette tape. The editing usually consists of correcting of names and dates that have been missed during an interview. The individual interviewed may also choose to expand upon topics that may not have been developed in the time allotted for the interview.

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TABLE OF CONTENTS
DR. VERNON C. JOHNSON

| | |
|--|----|
| Family and Education | 1 |
| Assignment to India and U.S. agricultural development programs | 2 |
| Preparation for assignments in Africa | 6 |
| Assignment to Nigeria: a major concentration country for U.S. assistance | 8 |
| Return to Washington | 13 |
| A year's sabbatical at the National War College | 14 |
| Overseeing agricultural programs in Vietnam | 16 |
| Back to the Nigeria Mission as Deputy Director | 17 |
| USAID Mission Director in Uganda | 20 |
| USAID Director in Tanzania | 22 |
| Appointment as Deputy Assistant Secretary in the African Bureau, Department of State . . | 29 |
| Observations on selected development issues | 31 |
| ANNEX: Size of Farms and Agricultural Development in Africa | 33 |
| Farm size | 33 |
| Observation | 33 |
| Small-scale farming | 33 |
| Future needs | 34 |
| A Possible Approach | 35 |
| Conclusion | 36 |

KEY WORDS
DR. VERNON C. JOHNSON

Africa
Agency for International Development (A.I.D.)
Agricultural Development
Agricultural extension and training
Agricultural research
Agricultural universities
Cooperation for Development in Africa (CDA)
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Fisheries
Forestry
Idi Amin
India
International Cooperation Administration (ICA)
Julius Nyerere
Livestock
National War College
Nigeria
Nigeria Relief Operations
Peace Corp
Poultry
Rice production
Small scale farming
Tanzania
U.S. technicians and their counterparts
Technical Cooperation Administration (Point 4)
Uganda
Vietnam

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An interview with
Dr. Vernon C. Johnson

Interviewed by: W. Haven North
Initial interview date: April 12, 1994

Family and Education

Q: The date today is April 12, 1994. This interview is with Dr. Vernon C. Johnson, who retired from the Agency for International Development in 1979. Vernon tell me about where you were born, your family background, and education.

JOHNSON: I was born in Mississippi on a small farm with general crops. It was in Clairborne County, Port Gibson between Natchez and Vicksburg. We grew the typical crops: cotton, corn, cowpeas, beans, sweet potatoes, things of that kind. We also grew livestock: cattle, pigs. That was our livelihood at that time. We were there at the heart of the great depression (1929-39) which was tragic for a lot of people, and, as a matter of fact, we lost the farm. We reverted to sharecropping and later to a rental status, which is a step above.

Q: We means who?

JOHNSON: My family: myself, my parents, and four brothers and sisters; I was the youngest. In time the others went away to work and only I was left. I should define the status of farm renter; a renter in the south any way, is a move beyond sharecropping to where the family has some capital, for example, you own a team of horses or mules; have tools (cultivators, plows, and whatnot). The landlord simply provides the land and receives one-fourth rather than one-half of the crop. So that was our status. I went to a small school in Port Gibson; a segregated school at that time because schools were segregated throughout the south. It went to Junior High, i.e., the eleventh grade; there was no twelfth grade in our school. I'm not sure how anybody anticipated that we would ever finish high school because it wasn't provided there. I dropped out of school for three years. Then I went to another county where my sister was teaching and finished high school. And later, I was admitted to Southern University in Baton Rouge, Louisiana. My brothers and sisters helped financially. I majored in vocational agriculture. This ties back, of course, to my early life on the farm. It was something I was quite familiar with.

Then World War II came and, having earlier dropped out of school for several years, I was old enough for the draft and entered the army in early 1942. I stayed in the army four years in the U.S. and Pacific theater.

Q: What unit were you with?

JOHNSON: Remember during World War II the military was segregated by race. The 92nd and 93rd Infantry Divisions were black units but, for the most part, they had white officers. I was in the reconnaissance troop of the 93rd Division. Our job was to scout and patrol in enemy territory and report movement of men and supplies by radio.

After the war I returned to Southern University on the G.I. bill. That bill was one of the great pieces of legislation because it gave veterans a chance for an education while keeping them occupied. In 1948 I received my B.S. degree in vocational agriculture. I also got married that year, and with the help of one of my professors, I later got a scholarship from the University of Wisconsin. At that time, black land grant universities did not have graduate schools and African-Americans were not admitted to so-called "white" universities in the south. I received my M.Sc. and PhD degrees (agricultural economics with emphasis on land economics) from Wisconsin in 1954 and immediately went to work at North Carolina A&T State University in Greensboro.

You may recall that in 1954 the Supreme Court ruled against segregation in all public education. This decision had a shattering impact throughout the South. Black institutions were at a loss on where to turn and white legal interests were busy exploring every possibility to escape integration. It was during this turmoil that I decided to seek other employment. Although I was not seeking overseas work, I read a request to the effect that A.I.D.'s predecessor agency was expressing interest in an agricultural economist to serve in Guatemala. So I wrote a letter expressing interest.

Q: What was it you read?

JOHNSON: It was just an ad expressing interest in an agricultural economist. I don't recall the magazine.

Q: What agency was this?

Assignment to India and U.S. agricultural development programs

JOHNSON: This was 1957 and, I believe, it was the International Cooperation Administration (ICA). Any way, I received a reply to my letter saying the position in Guatemala was filled but that a position was open in India. After follow-up I was employed and assigned the position of agricultural program assistant in New Delhi. As it happened, this was a very low level position not withstanding my degree, but I was determined to make the best of it.

Q: Had you known anything about Point Four type work before?

JOHNSON: I had skimmed articles on development theory, etc. since much of the subject-matter was related to agricultural economics. It was a new adventure, nonetheless, but I said "well look, it sounds O.K. so I'll give it a shot." The mission in India was called the Technical Cooperation Mission (TCM).

Q: Left over from the Technical Cooperation Administration (TCA) days or Point Four.

JOHNSON: That's right, so I worked in India for two years.

India was a most interesting country. Independence had come and the country had been partitioned to create Pakistan. It had just emerged from terrible internal fighting between Muslims and Hindus. Language issues, food shortages, and population pressures were among India's many problems. Among the basic institutions, there were several universities, but they had little to do with economic development. They were in the tradition of the British university to highlight the professions (law, medicine, etc.) and to teach but in the meantime far less on subjects having to do with economic development.

Q: These were universities in general or agricultural universities?

JOHNSON: When our Mission decided to assist at the university level, we selected those that taught more agricultural courses, but even at such institutions agricultural research was weak. You may recall that one of the most successful of A.I.D.'s projects is the university development that we fostered in India in which features of our land grant system were introduced to these universities in India. We sent literally hundreds of Indians to the U.S. to earn U.S. degrees. Each Indian university was assisted by, and attached to, a "sister" U.S. university —Ohio State, University of Tennessee, Missouri, Kansas State, etc. I was one of the persons who drafted the first PPA(project paper) to support these universities in India. In such papers we laid out the project purpose, objectives, courses of action to be taken, U.S. costs, how much and how many of each resource to be provided, numbers of Indians to be trained, responsibilities of the Indians, etc.

Q: You were there when this university project was started?

JOHNSON: Yes, even before it was started. Because the main purpose was to upgrade agriculture. The Agricultural Division of the Mission rather than the Education Division was assigned this project. Our Mission like other A.I.D. Missions had agricultural, education, health divisions and, of course, administrative units. I have some of the old papers downstairs covering our assistance to the Indian universities.

Even these universities, which are now successful and are making a real contribution to development, went through a long transition period of 15-20 years before their impact was felt. It was not until U.S. trained Indian scholars filtered into high positions at the universities and into government positions where support decisions are made and until an institutional structure was laid that change became a goal in itself. When all of these things began to come together, the universities became very progressive in doing agricultural research work and other work in development. So even if you do the right thing, nothing much happens until a lot of variables come together so that a critical mass is formed around a particular intent; that certainly was the case in India. So that was my first post.

Q: How long were you there?

JOHNSON: I was there only two years—1957-59.

Q: Did you have any particular impressions of India; did you get out into the rural areas and the farming communities? What was your impression of Indian agriculture at that time?

JOHNSON: Yes, well compared with American agriculture, it was antiquated, bullock powered, more people than you have ever seen, rural villages everywhere. However, the production of food was spotty. As for production complements, there were tube wells so that irrigation covered thousands of acres. With U.S. assistance, fertilizer plants commenced production. There was also a railroad system that could move goods. It was one of the best in Asia, at the time. So transportation did not present the kind of problems that was experienced in a lot of other developing countries. India had some things going for it that were quite beyond anything that I later experienced in Africa. And therefore, it is misleading to make a comparison that the Indian case is good example of what can be done in Africa. I never took this idea as being very helpful.

Q: Wasn't that the time when people despaired of Indian agriculture; that the country would never feed itself?

JOHNSON: Very few gave the country much hope; it was a big country steeped in tradition; religious elements including the caste structure was said to hold back development. The historical make-up of India was considered to be a constraint to development. There was some despair at the time and it took twenty years to work through it; to get people educated, to put the right emphasis on development, to put capital into agriculture and other elements. As noted, we helped to establish the first fertilizer plants in the country. Steel mills came in at that time; the Germans assisted as did the Russians. The Americans helped to improve several that were already in the country, e.g., the Tata Plant, that kind of thing. So India strengthened its infrastructure, but it took time to develop and to mesh other elements of development into a growing country. India's products are now featured on the New York Stock Exchange here and are doing very well in that market. They found a way. Population has grown by 200 million people over the past 25 years; yet, they found a way to feed themselves.

Q: Did you work with the Indians; what was your relationship?

JOHNSON: Well, of course, there were Indians within the A.I.D. organization; they were among the best local employees anywhere, in terms of knowledge and ability. The typist in our office could do 90-100 words a minute on manual typewriters and had a memory of elephant proportions; he was a person who remembered the name of every person we sent overseas for training; and, on every other subject, he made a point of not having to go to the files. So we had excellent people to work with in India. In the rural areas we had, of course, our counterparts and we visited villages together to observe farming practices. The counterpart system has had its

flaws in India as well as elsewhere. But we did the useful things that A.I.D. does well. We knew what was going on and that kind of thing and had some success in bringing change.

Q: Were there many direct hire agriculturists (A.I.D. employees) as well as the university contractors?

JOHNSON: Most were direct hire; but there was a considerable number of contract people as well.

Q: How many would you say?

JOHNSON: I'd say 150 something like that, plus contractors at each of the assisted universities. You may recall, however, in the Nixon Administration, direct hires were reduced to persons called "generalists." Contract employees were from universities and PASAs (Participating Agency Service Agreements with U.S. Government agencies). They did most of the technical work. This was unlike the technical work in India which was mainly done by direct hire people.

Q: What was your impression of the Agency's development policies in those days?

JOHNSON: As I said, I went there with no clear conception of where the priorities should be. But, I think, the most lasting thing is the institution building that we did. Other work was useful; we had a large Mission; it was well staffed; it was well funded considering the time. India was one of the countries that was reasonably high on A.I.D.'s priority list; we thought it was a good place to test ideas about development.

Q: Apart from the institution building were there any other dimensions of the development policy or strategy at that time that were particularly distinctive?

JOHNSON: Well, we had the education division, the health division: all of these were elements of our development work there that went very well. We associated ourselves with clinics. Most assistance took the form of resource transfers. Development loans were just appearing on the horizon. Food aid was a major program; it had come into prominence during the late 1950s. You can imagine that in a country like India famine was weighed by the size of every crop harvest.

Q: Did you have any contact with the Embassy or the Ambassador or sense of U.S. overall policy?

JOHNSON: Not at my level. I was functioning as an Agricultural Program Assistant whose duty was to grind out the paper. Except for Indian friends and Indians in agriculture as counterparts my contacts were limited. At higher levels, our Food and Agricultural Officer, for example, actually had his office in the Ministry of Agriculture, not in A.I.D. That was Dr. Parker. That proved to be a very fruitful way because they trusted him fully.

Q: The relations with the Indian bureaucracy was on good terms?

JOHNSON: The Indian civil service had many good people but the bureaucracy itself was ponderous with many flaws. The caste system had a deleterious impact on almost everything that occurred in India. Some people in positions of influence were competent while some were not; so there was a variation in the quality of people who were in charge. Indians were always very zealous about their sovereignty; despite that fact that the U.S. was providing assistance, there was always a question of how far as a foreign entity we should be trusted. Therefore, ours was a particular relationship.

Q: In other words there was considerable sensitivity if you pushed too hard on policy issues.

JOHNSON: That's right though many strong friendships existed at personal levels. My Indian experience was my first one and a useful one. After thirty years, I still correspond with people that I knew there. Many were Indian agriculturists who were trained here and who worked in the A.I.D. office at the time.

Q: Anything else on the India experience?

JOHNSON: No, in summary, I think it was a country of great importance. Later we began to dampen our assistance there, but, I think, they are grateful for our help during their early days of independence. Currently, India is doing much better economically. It is a democracy with a market economy and a good university system, so perhaps A.I.D. should receive more credit than has been given.

Preparation for assignments in Africa

Q: So what happened next?

JOHNSON: I left India because the agency was beginning to recognize important changes in Africa. In 1957 Ghana had become independent, Guinea became independent in 1958, despite the chagrin of DeGaulle. Nigeria was on the verge of independence. After World War II, it was clear that the colonial powers were too weak to retain their colonies for long, meanwhile, the U.S., which had always depended on Britain and France for policy and analytical guidance toward Africa had no African policy. What we saw in Africa was a huge land mass with more than 40 poverty-prone colonies, and in the making an enormous political vacuum. For the U.S., the vacuum also was a knowledge blackout.

Given this lack of knowledge, two groups of about 15 people each were selected from agency ranks to take a crash study course and a quick observation tour in Africa. I was selected as a member of the first group called "Africa training Group I." A second group was called "Group II." Boston University had been contracted to handle the orientation, but in retrospect the people in Boston didn't know much either. On leaving Boston, we traveled to the U.K., France, Belgium (the principal colonial powers in Africa). We also visited Holland not because it had African colonies, but it had colonial experience elsewhere. On leaving Europe, we traveled to Africa:

Liberia, Ghana, Nigeria, and several French-speaking colonies. After our tour of African countries, we were assigned to the new U.S. aid missions there.

Q: This was really the beginning of training people to work in Africa?

JOHNSON: This was the beginning of trying to bring the African experience into the framework of U.S. aid; this was at the end of the Eisenhower years. Many of our group were assigned to Nigeria, Liberia, Ghana...

Q: What did you think about the training; what did you get out of that experience?

JOHNSON: Having no genuine concept of Africa otherwise...it was helpful. We got a good descriptive picture of the cropping patterns, the importance of livestock in the economy, mining, the nature of education and technical training, visits to two of the universities in Ghana and Nigeria. It familiarized us with an area about which we had little knowledge.

Q: What kind of impression did you get of the Europeans view of Africa when they briefed you?

JOHNSON: It was mainly from a colonial perspective about the people and African economies, of the crops that were grown there: they talked about cocoa, peanuts, cotton, palm oil. We had lectures at the University of Oxford on different crops that were mainly for export. Besides professors, lecturers came from Unilever and other firms. This kind of knowledge was useful, as we were about to visit Africa.

Q: Was there any special view about the potential for African development?

JOHNSON: No, very little; I don't recall anybody hazarding a guess about how far the continent was going. Although Zaire (Congo) was on the verge of independence, it was not acknowledged. We went to Belgium and had a political discussion: the gist of that was that the Congo was not prepared for independence. Two weeks later it had broken away! The important thing is that the African countries had been managed as colonies and were now groping as independent countries. With British and French influence diminishing, a huge vacuum was created. In thinking back, U.S. knowledge was shallow. On planning, we brought people in... people from our universities. In Nigeria, for example, we helped prepare the first development plan—a document based on very little hard information. It was well written but, for the most part, was a "wish list" based on very flimsy data..

Q: What document?

JOHNSON: This was the first development plan in Nigeria. Wolf Stolper and others came in to help, after we had organized the A.I.D. Mission there.

Assignment to Nigeria: a major concentration country for U.S. assistance

When I first went to Nigeria, there was a Food and Agricultural Officer but no director. I went in early 1960, before independence. Later a Mission Director came and the Mission began to be staffed. When the Kennedy Administration came to power, Nigeria and Brazil were the two countries in the world that were selected as special cases; money was earmarked in advance. The Mission knew exactly how much money it was to receive—a five year commitment of \$225 million. This ignited a scramble for projects.

My own position was unclear but I was told to assist the Food & Agricultural Officer. About a year later, I went to the Western Region of Nigeria to handle the agricultural work there. The country was divided into regions; thus we established a sub-mission in the North, one in the East, and one in the West. Each regional entity developed its own development package. The Mission grew very rapidly; I think by 1964-65, it was considered the largest Mission in the world approaching 500 working people including contract personnel-university contracts, contracts for technical schools, and hundreds of direct hire people. A.I.D.'s presence was pronounced throughout the country.

It is difficult to measure how much benefit came from this. As in India, we helped to establish agricultural universities. We went back to evaluate the universities a few years ago in 1988, and, while they were not functioning as productively as they might, the universities were still there; they were still being financed; they were still trying to generate agricultural research and carry on other university functions. On the other hand, it is clear that when A.I.D. phases out with a cut-off of funds and imported commodities, most projects deteriorate. Thus, we found old vehicle graveyards, abandoned laboratories, and frustration among faculty members..

Q: What about the technical assistance apart from the university technical assistance; there was large program in that work?

JOHNSON: Yes, there were technical assistance projects everywhere: in crops, education—every kind of school that could be assisted in Nigeria was assisted: elementary education, secondary education, college education, technical schools—all of this. There was a considerable health program where we gave assistance to rural clinics and hospitals; and to different elements of health; training and that kind of thing.

In terms of impact, if scale in terms of numbers meant anything, then A.I.D. should have come through with flying colors. And as I said, there are considerable elements of A.I.D.'s presence there that remained, particularly in training and educational institutions of the country. There are hundreds, literally thousands of Nigerians who received training in the U.S., who are very bright people. The oil syndrome that came later tended to blot out real thinking about development because for a few years everybody thought that oil would do it all. Thus Nigeria had the handicap of an oil mentality... and, of course, it has gone through a number of political upheavals including a disastrous civil war. It is just now, I think, trying to straighten itself out.

Q: How would you characterize the development policy or strategy of the U.S. at that time vis-a-vis Nigeria?

JOHNSON: I think, the selection of development targets was o.k. For example, we assisted the agricultural universities and research stations. In retrospect, we tried to do too much within a limited time span. But the things that we were doing there were needed; whether or not we approached it right is open to debate. We know for sure that improving an economy on a sustained basis is far more difficult than constructing a building or a bridge. Control cannot be retained. Thus, we greatly underestimated the development problem.

Q: Give an example apart from the universities?

JOHNSON: For example, we had scientists at every agricultural research station—in Nigeria as in most other countries agricultural research was managed by the government. And every region had a major agricultural research station: Moor Plantation was the one in the Western Region, for example. We had ten or twelve people there, all scientists helping with agricultural research, trying to develop new varieties, new approaches to production, to cultivation, plant breeding, etc. In the Northern Region in the last few years when I was there—1988—crop production had advanced significantly. I'm not sure whether it came from the regional research that we assisted, but there was significant research in vegetable production, for example; truck loads were coming from the North to the South; this was not characteristic during my time there. The livestock rather than being trekked down, as had been customary, were being brought down by rail or truck, and there was more emphasis on trying to up-breed livestock; this was one of our big projects there. So we got into many phases of development, and always agricultural training was significant. We had people in agricultural engineering, in agronomy, in soil science. And so it went, throughout the range of agricultural development. And all the time, we had our scientists working closely with the Nigerians.

Q: How did you find working with the Nigerians?

JOHNSON: Fine; I think in general Americans have no problems in working with the people they find in these countries. To the extent that problems arose, they were problems of frustration that stemmed from government practices, government operations, government directions, government weaknesses, lack of finance and this kind of thing. They could not do the things that a counterpart government needed to do.

Q: Explain that a bit?

JOHNSON: The host countries didn't have the resources. We anticipated, for example, that a host country would make a major contribution to each one of the projects. They were never supposed to be American projects; they were always Nigerian projects but frequently as in Nigeria and later in Tanzania, for example, the budget would be bare just when gasoline was needed to operate the seed farm. What do you do? You either cover some of their responsibilities or the project itself suffers. Also in the counterpart system, we anticipated that the government would always provide people as counterparts; that these people would work with our technicians there; and, perhaps, then come to the U.S. for further training. But, in many cases, the counterparts were so far below the capabilities of the U.S. technician there was not much of an

exchange of ideas. Or, in some cases, counterparts who were supposed to be available might never be assigned. The counterpart system was never as helpful or as smooth as it was supposed to be. These are example situations that point out some of the flaws and weaknesses in our assumptions about dispensing economic assistance. And I think this is common to aid efforts almost everywhere: lack of resources, lack of trained people, lack of interest in some of the things that donors think are critical.

Q: Were we pushing ideas that they weren't enthusiastic about or didn't want?

JOHNSON: I'm not sure you could say they didn't want them; for example, in a country like Tanzania that I know a great deal about—I was there four or five years—they wanted almost everything but on their terms.

Q: Let's stay on Nigeria and come back to Tanzania.

JOHNSON: O.K., in Nigeria, I think that for some of the projects there was less enthusiasm than for others. The university projects in Nigeria were granted great enthusiasm even at the top levels of government such as the Vice-President. The prestige projects had governmental support, but for some other projects that was not necessarily the case. In Western Nigeria, for example, where large farms had been anticipated by the government, there was great support and a call on donors to get involved. We didn't think that these farms had much promise so preferences were evident on both sides.

Q: By large farms, you mean plantations?

JOHNSON: Yes, parastatal farms; there were several in the country on the scale of several thousand acres. Those never developed as sound economic enterprises in any of the countries that I recall; and so in Nigeria this was as true there as elsewhere. The government had great interest in highly visible projects and they called on us for assistance. There were some other projects that we preferred, lets say, in agriculture research, especially in the universities; we were trying to instill and install agricultural research within the structure of the universities. That had never been a practice in these countries and, therefore, they never gave it the kind of support that we thought was necessary at that time. Even in India, it took a while for such long maturing projects to reach payoff.

Q: What about the idea of extension services?

JOHNSON: The idea of a strong extension service was accepted, but it offered more employment than real support for production.. It was always a government operation from the Ministry of Agriculture and as much a political pay-off as an agricultural activity. Americans were much more prone to a strong extension program as a part of our triangle approach of research, teaching, and extension. Host countries gave support, but it was not with the enthusiasm that most Americans would have preferred.

Q: And the emphasis on small farmer food production, was that important to the Nigerians?

JOHNSON: Food production was not a highlight; I think Americans generated more support for research into food production than anybody had done before. For example, in Nigeria there was a cocoa research institute out at Moor Plantation which got most government support money in Western Nigeria. Those kinds of activities were better supported because they were pointed towards cash export crops. The three primary cash crops in Nigeria were: cocoa in the West, palm oil in the East, and peanuts in the North. This is where a great deal of the research funds had gone.

Q: But why wasn't there much interest in supporting food production?

JOHNSON: Well, food shortage had not been a significant problem; there had been very little famine in Africa; and there are widely consumed foods from the so-called "hungry crops" which in Africa are root crops: cassava and yams—heavy starchy crops. They were very easy to produce needing very little cultivation and management and very little capital. Though low in nutrition, these crops are ideal since the people are accustomed to them and seemed to prefer starchy foods of this kind. Moreover, being root crops, there were no major weather-related problems as you have in India where grain crops are the principal ones. If there is a prolonged drought in grain areas, famine may follow. In Nigeria, for example, especially in the South where root crops were the critical crops, drought didn't wipe out the food supply. The colonialists were, therefore, never driven to emphasize food crops.

In Northern Nigeria, there was more of a food problem—but there was no great population pressure at that time, although Nigeria had more people there than any other country on the continent. The primary emphasis was simply not on food production as long as people had basic foods to eat. Thus, food production never worked its way into the financial and technical aspects of development in the country.

Q: Did you have any impression of US policy towards Nigeria and the role of the Ambassador and the Embassy?

JOHNSON: Of course, when the Kennedy years came and Nigeria was selected as a special case, this was a big plus. It was one of the two countries in the world that the U.S. was focusing on. Our focus turned to deciding on the right projects to finance. The idea was to bring competent people in and move the process along. We built houses for Nigerian and American technicians; we did all the things that were needed to accommodate the inflow of resources which, at that time, were greater, I think, than anything that had happened in Africa before. We were spending about \$45 million a year with a guarantee of \$225 million spread over five years. That covered a lot of project activities at that time. From that perspective I think the Nigerians looked upon us with great favor. We got along well with the several regional governments. Though in Northern Nigeria, the development project priorities change somewhat but, in general, everyone was enthusiastic.

Q: Did you associate with the Peace Corp in Nigeria at that time?

JOHNSON: Not a lot; the Peace Corp was just getting started. Sergeant Schriver came to Nigeria in 1961 and one of their bigger groups was posted in Nigeria: school teachers and what not. But again the kind of small activities that are customary in the Peace Corp are not long lasting, except as through the training of people. There was little permanence. You can go to a village where a Peace Corp person was posted; the person is remembered, perhaps, 20 years later, but I don't think that you will find much else. Likewise those A.I.D. projects that took on similar characteristics also disappeared in the midst of poverty-based disinterest when A.I.D. is phased out. I think fewer open ended projects where A.I.D. is prepared to stay the course might be more promising in development than many projects that go five years only to phase out. this was the common practice in A.I.D. It did not work to the advantage of the development process.

Q: That's an important point. A question that I keep thinking about is: was there any significance although not a lasting impact, was there something accomplished during that period of a more short term character?

JOHNSON: I'm not sure whether there is a measure that will indicate clearly what the level of accomplishment was. They are not things that one can measure well. Let me leave Nigeria for a moment to make this point: some countries of Latin America and the Asian rim were no better off than a lot of other countries twenty years ago. One could not have predicted where these countries were going. In twenty years, however, they began to produce; their industry began to develop; their agriculture is better than it was ten years ago; they're feeding themselves; they're beginning to export. And thus, perhaps, just holding hands through the "bad" years may have been more beneficial than we imagined at the time.

Where as one may not be able to measure these things in Nigeria, without any doubt the quality of people in the country is far beyond anything we knew in my time there. The numbers of college graduates are indeed impressive—and they have more Nigerians in overseas training than ever before. It is a country that has rushed into the training but the capital needed hasn't caught up. Oil money has made a difference. In any case, the country is more modern; the roads are better; the universities are there; the high schools are better financed now. I think the country has progressed and advanced fairly significantly over time.

Q: How would you relate that to any U.S. assistance?

JOHNSON: Some of it can't be related. What you can say is that our emphasis on training was also desired by the Nigerians and supported by them to the extent they could support things. Some of the institutions are still there and functioning. Even the research stations are still going, although they have not advanced as they should. In the North, the Ahmadu Bello University is doing a lot of research. They have taken over all the research in the area. It is a better quality research than was true in the old days when the government was doing it. If you try to get a measure of what percent are better off in a country like this, I don't think you can assess the problem in that way.

Q: But you are suggesting that U.S. influence through its development programs had a major influence in reorienting the research; more to food production. And generally increasing the numbers in education and agriculture..

JOHNSON: Yes, extension in the North is now divorced entirely from the government and is affiliated with the university; this is true in other regions though not as well placed as it is in the Northern part of the country.

Q: Apart from any particular activity such as soil conservation or well drilling or whatever, the influence of the U.S. engagement both in terms of people coming to the States and in Americans going to Nigeria, what other aspects?

JOHNSON: I did briefly mention that there is a flow of goods over the country; now of course transportation has had a good deal to do with this. But I've seen truck loads of vegetables such as tomatoes coming from the North to South that was not true in our time. So I think commercialization is progressing. In fact, there is an up-beat in tempo of commercialization in the country. Whether or not it goes back to our extension and our agricultural training and this kind of thing, one cannot say with certainty.

Q: Were we working on agricultural marketing?

JOHNSON: We did some work on agricultural marketing; we did some work on trying to get into food production more thoroughly than had been the case in the past. And more food was produced; and more food is being commercialized and flowing over the country. Prices are too high so the markets are imperfect. Meanwhile, there is certainly no doubt that some of the economic mechanisms were overshadowed by oil expectations. There seemed to have been opportunities that were not being pursued in the economy. This partially explains why prices were high.

Q: After you were in the Western Region you moved to...?

JOHNSON: I came from Ibadan back to Lagos to serve as acting deputy food and agricultural officer. And at that time Washington needed a person as deputy to the agricultural office in the African Bureau; there was an agricultural division in the Africa Bureau; Fran LeBeau ran it. Rather than keeping the job in Lagos, I had a chance to come back to the States for a time. So I came back and worked here for a couple of years.

Return to Washington

Q: Lets move on from Nigeria; what happened after that?

JOHNSON: After Nigeria I came back to Washington; I had shifted from Lagos to the Western Region of Nigeria, back to Lagos and was sent to Washington; the agricultural office in A.I.D./Washington was rather substantial at that time. This was in 1964. I worked there a year

doing the kind of routine work that one does in Washington in terms of examining projects, correspondence with the field, trips to the field from time to time; bureaucratic activities that related to A.I.D.'s work in agricultural activities in the field. Our office functions spread over the continent wherever we had Missions rather than being in a particular region. We were the arm of the African Bureau for agricultural insights, etc.

Q: What was the general policy or strategy at that time?

JOHNSON: It was during the time of the Johnson Administration and he had carried forward A.I.D. activities that had been promulgated under the Kennedy Administration. In agriculture we were still doing a good deal of direct hire activities and contract activity; program loans were becoming more prominent; food aid was still substantial and growing over the continent. It was pretty much the routine work of A.I.D. following up on field programs, looking at project approvals, etc.

Q: Where did you go from there?

A year's sabbatical at the National War College

JOHNSON: I went to the National War College. I was selected: Ervin Long and others were on the committee. They knew my record and so they choose me to go to the National War College; I went there for a year at Fort McNair. It was quite an experience.

Q: How would characterize that experience?

JOHNSON: It was different from any typical experience in A.I.D. because one could study for a year without other work requirements. The usual thing was to bring very high level speakers; excellent speakers; Ambassadors from different countries, e.g., the Ambassador from South Africa came. Critical parts of the world where there were problems were discussed. They would bring other speakers in: Walk Rostow was one of the speakers; Secretary Kissinger, I think, was one but, in any case, people at that level would come in. At the end of the year, every student had to do a fairly elaborate term paper. I did mine on India because I had served there and had material that I could use. The students were selected from four segments: Air Force, Army, Marines/Navy, civilians— 45 people from each unit.

Q: What kind of a reception did you have from that group for somebody working in development? Was there any interest in it?

JOHNSON: Yes, there was some interest in it. We had 3-4 speakers on development over the year. it was realized that the world was coming closer together and as transportation and communications and all the rest of the technological implications began to unfold; what happens in the other parts of the world grows in importance. Where resources come from, and where exports are likely to go. Its an intellectual discussion.

Q: Why would the War College and the military who attended it have any interest in having people from A.I.D. there ?

JOHNSON: Of course, one interest of the War College was how to keep the peace. There was a good deal of interest in generating peace and maintaining peace, and economic development, of course, was thought to be an important element of keeping the peace.

Q: You found the military people interested?

JOHNSON: Yes, they were interested but I'm not saying that it was the peak of their interest. But they were certainly interest in where the world was going and what their future assignments could possibly be.

Q: What do you think you got out of it?

JOHNSON: I got a significant appreciation for military thinking and what they do. In other words, much more exposure: my experience in the military had been in the jungles in the Pacific during World War II. At the War College, there was a lot of strategic discussion: the role of one element of the military versus another. Then there is the whole business of military technology and the progress that was being made weapons-wise, that kind of thing. So I got exposed to elements of importance that were not typical in the aid development process. We also saw very highly classified technology.

Q: What about U.S. policy generally; was there a lot on that?

JOHNSON: Yes, there was a lot on that because, of course, the political elements and policy making in general applies to military elements and military factors as well as in the other elements of our national existence.

Q: Was there any particular theme?

JOHNSON: Not as such, the approach was to inter-relate problems that were of mutual importance across our government. This was 25 years ago and, of course, the cold war was the central concern and the hottest issue was the war in Vietnam. The non-military members of our class were from State, A.I.D., USIS, USDA (attaches)—i.e., those agencies that had to do with foreign affairs.

Q: You wrote a paper on India; what was the theme of that?

JOHNSON: It covered economic development problems and related issues in India, and some of the steps being taken by that country. At that time, India was still in an economic mire. In our lectures, India was suggested as a possible counter to China, thus, there was interest in it.

Overseeing agricultural programs in Vietnam

Q: Where did you go from there?

JOHNSON: From the War College I went to the Vietnam Bureau. USAID had set aside funds for a separate Vietnam Bureau and I headed agriculture in the Bureau at that time. Jim Grant was the chief and our work was to back stop agriculture programs in Vietnam. I went out there twice and worked with the Mission in the field.

Q: What were we trying to do in agriculture?

JOHNSON: It was mainly security oriented; secure the villages, etc. All had a military purpose. For example, the agricultural programs were involved in the business of pig raising and pig feeding within the construct of a fortified village. We imported the first improved rice seeds that were produced in the Philippines and carried to Vietnam. I was in the Philippines when we were loading the ships. These were improved rice varieties. I understand those varieties of rice are the prominent ones in Vietnam even now.

Q: What other agricultural endeavors were you trying to promote in Vietnam?

JOHNSON: The general objective of agriculture was to improve village activity as I recall. Most of the people outside the cities were, of course, farmers and rice was the critical crop. Vegetable production was another element of activity and Taiwan was responsible for this work. You may recall that, at one time, particular countries were responsible for research in the development of particular crops. Taiwan was responsible for developing vegetable research and production; Mexico for wheat, etc. There were extension people assigned to Vietnam villages during the war. As for the Vietcong... their feeling was that of non-interference in the production of food because they would probably get a share of it.

Q: What years were you back-stopping the work in Vietnam?

JOHNSON: This was in 1967-68. I was in that job there about a year and a half.

Q: Did you have any particular feelings or views about U.S. policy towards Vietnam at that time?

JOHNSON: Not really, I thought we should have been there and we should do what we could do. The war wasn't a pretty thing to see, however, but, I suppose, most Americans thought we should have been in Vietnam and being government employees we helped do what we could. The cold war was at its height and that was one of the main factors—with the Soviet Union supporting the North and, of course, with the Americans supporting the South. I had just left the country when the Tet attacks occurred. This was one of the main offences from North Vietnam into the South. AID was there in great numbers trying to assist with food needs and, in general, to support the people of the South Vietnamese Government while they were trying to win the war.

Q: So it wasn't long term development?

JOHNSON: It wasn't long term development at all, no. It was, as I said, emergency work, doing whatever was needed in the villages that still were accessible day by day. A person might be assigned several villages and was expected to make his rounds. Each morning one checked with security about security in his village areas. If Viet Cong were in the area, our technicians stayed away.

Q: Do you think there has been any effect of this work in Vietnam that was lasting?

JOHNSON: The Vietnamese were very industrious people, anyway. I think this was probably be true whether it was north or south. So with minimal help for survival, they would make it. They worked assiduously. I don't think that long term institutional building was intended, but some of the improved varieties of rice and vegetables that we took in are, no doubt, still being used; I'm sure the legacy of that is still there.

Q: Are any of the philosophies or American approaches to agriculture preset there?

JOHNSON: Not as such; for one thing, the farming there is dominated by traditional Asian methods of rice production. The best thing one could do was to provide the Vietnamese with those things that improve their own performance rather than give technical advice. So it was mainly a supply program more than anything else. And this was under unique and unusual conditions, so you would have not expected the typical A.I.D. organization and A.I.D. program, although there was a food and agriculture office, a Mission Director (always a top administrator, a very well thought of person.) The Director during my time had come from Nigeria—Don MacDonald.

Q: Well let's move on.

Back to the Nigeria Mission as Deputy Director

JOHNSON: When I was still in the Vietnam Bureau, Mike Adler had gone out to Nigeria as deputy director and had moved up to be Director. I had been one of the persons who briefed him before he left Washington; and when he needed a deputy he asked me to come out. So I went back to Nigeria a second time and became Mike's deputy. Two weeks after I got into the country, Mike went on a long home leave; that was late in 1968. So I took over the Mission. In spite of a civil war then being fought, we still had about 200 employees—down from the 500 I mentioned before at the height of the Nigerian program.

Q: This was two years after the first coup in 1966?

JOHNSON: Yes, in 1968; the war was centered in the Eastern part of the country and that was always a topic for discussions at the Ambassador's staff meeting—the process of the war, who was winning, whether food was getting in, what was happening! In Nigeria even under war

conditions, the effects were not very strong in the rest of the country. In other words, people kept doing their work; the universities still kept going except for Nsukka, the one in the East. The other A.I.D. projects still continued to go although the war was continuing. There was a great deal of support here (in the U.S.) for one side or the other but the Mission continued to function and the Embassy continued to function, although reports on the civil war dominated the Embassy reports..

Q: It didn't affect the program?

JOHNSON: Not a great deal. The people in the Ministries were still in place and the programs were still going. It was only in the East that there was great disruption; Enugu had disappeared as a city; all the agricultural research activities and the work stations had gone out of business. And the East was on a war time footing. But the rest of the country was not significantly affected. The program was still one of the largest A.I.D. programs in the world. It continued with much of the same kind of activity that had gone on before: agriculture, health, education. A lot of the work was in the North ... which in a way reflected support for the Federal Government.

Q: Were you involved in the relief operation?

JOHNSON: Not directly involved. There was an attempt to be neutral on relief issues, notwithstanding some of the pressures in the U.S. to support the rebels. The religious factor in terms of Eastern Nigeria was important in this regard; the Ebos were Christians; they were more highly educated. There was a great deal of support in the U.S. for them. We, of course, being accredited to the Federal Government gave no support to the Eastern Government. U.S. relief was private and purely humanitarian. The same kind of pictures of starving children that have come out of Somalia, Ethiopia, and other places since then were, of course, part of the scene in Eastern Nigeria at that time.

Q: How were relations with the Nigerian Government?

JOHNSON: I think they were fairly good; some of our people had quite close relationships even up to and through one or two of the Federal generals. I think we always kept a proper stance. Our Ambassador had come from Liberia... Ambassador Matthews, an excellent statesman in the sense of keeping the right balance and the right approach to things. We were on a good footing with the Nigerian Government.

Q: I had the impression that at some point in the process the Embassy's relationships with the Government deteriorated and they weren't really communicating and only the A.I.D. Mission was really accepted?

JOHNSON: That was probably true intermittently when rumors suggested U.S. support for the rebels. Adler, the U.S.A.I.D. Director, had a very close relationship, a good working relationship with some of the people. I think you came out once and may have noted good relations with Allison Aida. He was the Principal Secretary for Economic Development and Finance. He had

a good deal of weight in the Government and our relationship with him remained cordial right through the war. And as a matter of fact, we were bringing in a lot of development resources. Remember this was the pre-oil period; the wells weren't flowing at that time, so Nigeria needed all the assistance it could get.

Q: But generally the U.S. policy for supporting "one Nigeria" was appropriate from your point of view?

JOHNSON: Oh yes; there was no doubt about that. Our official policy remained focussed on "one Nigeria."

Q: But it began to be a bit ambivalent?

JOHNSON: Because of the tendency of trying to keep one ear pegged to Washington where there was a great deal of support for Eastern Nigeria, and certain U.S. universities that had been working in the East were certainly very strong in their support for Eastern objectives. But in terms of posture, political posture, the "one Nigeria" policy was kept in focus by the Ambassador and by his people. The Nigerians were probably a little wary about what we thought; and some of our people might have made an off remark at a cocktail party, but the policy was clear.

Q: What was the Nigerians reactions to all of the actions of the relief operators, all the foreigners coming in?

JOHNSON: They weren't happy about that of course (the relief flights into Biafra); they couldn't do anything; they didn't have a workable air force, although they did have a few MIG planes. However, the Easterners timed the operation so that when the relief planes came, I think the lights were turned on for one minute on the runway. If the plane couldn't take advantage of that, a plane wreck could occur.

Q: But on the Federal side what were the relations with the relief operations?

JOHNSON: On the Nigerian side, there was discontent even about humanitarian relief. I think the Nigerians, during the war, never accepted the idea of relief but grudgingly tolerated it. They claimed that food relief would be used for the military.

Q: Were there any other aspects of your work at that time?

JOHNSON: Not anything that stood out; we were just carrying out the requirements that the Embassy put on the Mission and that we as a Mission put on ourselves in carrying out the program that had been approved in Washington.

Q: Was there change in the policy towards Nigeria while you were still there?

JOHNSON: Not before I left in 1970. The Mission was still in place. I left Mike Adler there and John Hummon and Bill Ford came in as directors later on. I don't recall any significant change in policy. The Federal Government had won the war and they were in good spirits about that. And the East was in shambles and trying to put itself back together. Enugu, the capitol in the East, had elephant grass 15 feet high in the street.

Q: Were we trying to help in the East?

JOHNSON: After the war, we began to help as things opened up to the extent one could get in there to do something. I was not there long enough after the war to assess that, but there was nothing to prevent it. Otherwise, we were still training Nigerians; we were still helping with the universities; we were still doing many of the things that had commenced in the 1960s.

Q: What's next?

USAID Mission Director in Uganda

JOHNSON: After Nigeria, I came back to Washington for a short time and was assigned as U.S.A.I.D. Director to Uganda. That was in 1970. It was a nice mission, with 40-50 employees, and, thus, it was small compared with Nigeria. Development of improved ranches for cattle was one of the big projects. We were had a major contract at Makerere University; other educational/training programs were supported, agricultural research, a medium size poultry project, and assistance to health rounded out our program. Obete was President when I went there. A few months later he attended a conference in Asia and upon his return a coup had occurred. That's when Idi Amin became the leader. During the coup, we could hear machine guns and large guns firing very near our house in Kampala.

Uganda had been looked upon as having a rather special development prospect in East Africa. It was small and manageable. It was tolerant of its Asian citizens who were good business people. Its biggest asset was Makerere University, which, by any measure, was the finest university in all of Black Africa. Its graduates were spread over East Africa and in Uganda; most government posts were held by Makerere graduates. The university had good teachers who conducted a good bit of research. In fact, students from other countries, even from the U.S., came to Uganda to study under certain Makerere professors.

After a while the presence of Idi Amin was beginning to be felt and things began to change for the worse. This suggests that leadership can make or break the development process. In time, the better Ministers were relieved or they escaped in fear of Amin. Important people including Ministers began to "disappear" which was the common word that Ugandans used. White Peugeot were the common car that some of the C.I.D. people used; if a white Peugeot was parked nearby, people would become very nervous because somebody could end up in the trunk of the car and never seen again. This was fairly common; all kinds of weird and bazaar things occurred that one would never think could occur in a government setting. A top judge in the country was

arrested and brought to a cocktail party where ladies were in their finery and the poor man was paraded before the whole group on his hands and knees in mock subservience. Even foreigners were becoming more nervous, because, for A.I.D., our cattle ranches and other projects sites were far removed from Kampala; people were posted there. Our Division Chiefs and backstopping officers had to go out to these sites which became more risky. So we reached the point that we just decided that it was not worth the effort.

Q: Was any of this directed against the Americans?

JOHNSON: Not Americans in government but two Americans who lived in the country were killed. Because the climate is so pleasant (the only place where I never used a heater or an air-conditioner), some Americans had moved there including a few black Americans, for example. If they ran afoul of the government, they sought help from the Embassy to get out of the country. Nobody in the American government was accosted.

I had been in Uganda for three years when we decided to close the Mission. We recommended it to Washington and got approval to close. That's quite a feat itself going through the routine of closing down a Mission. Precise procedures had to be followed: selling things like refrigerators and stoves and whole houses of furniture. Keeping records. The night before we left, we were down to two people, myself and one other; we slept on the floor and left early the next morning.

During our packing to leave, Idi Amin sent for me because he had an idea that the British were forcing our hand. So he wanted to talk with me about it and find out why we were leaving. I went to the Ambassador, who said don't bother. Ambassador Melady said that he would take care of it. The Embassy stayed there after the Mission's closure.

In despotic countries such as Uganda at that time an Ambassador and Mission Director need close and frequent instructions. In this case, the Ambassador thought that our job was to project U.S. interests by maintaining good relations with Idi Amin's government. Most of us, including myself, thought otherwise. This made for friction within the overall U.S. Mission.

Q: What happened to the projects?

JOHNSON: We simply abandoned them. Going back eight years later, there were only remnants of some of the projects. I think that is symptomatic of so many projects, particularly in Africa, that, once the resources from outside are severed, it is very difficult for these project to be sustained. There are several reasons for this. For example, in an A.I.D. project that is on-going the resources and funds that are associated with the project give A.I.D. leverage to apply pressure on the government to deliver on whatever share they are to provide. However, at the point of phase out, that pressure, as well as the resources, disappears; the counterpart who worked with the project might be effective and efficient technically, but he has no clout to extract funds from the treasury.

Thus, one of the reasons that a lot of technical assistance projects deteriorate after phase out is purely cultural; the person who is left in charge of the project simply does not have access, remember he is just a technician, and to face the Minister of Finance is a real problem for him. So when the project needs resources—gasoline or some other critical item of work begins to lag— it goes down from there. the local technician simply can't do what the American technician (who has a resource base) could do when he was there. Support systems fail to function: there are some technical reasons but access on the part of individuals in terms of class and standards is the critical factor in this.

Q: It was a difficult time, wasn't it, to have to close out a program?

USAID Director in Tanzania

JOHNSON: Yes, that's right. We came back to Washington and I was reassigned to Tanzania; just two countries removed from Uganda so I was still in East Africa. It was another tough experience in the sense that Tanzania was considered by most Americans to have a socialistic approach to development. Julius Nyerere, the President, was highly thought of and very intellectually alert. He could hold a conversation and negotiate with almost anybody, but his approach to development disturbed some Americans.

Q: Did you meet with him?

JOHNSON: Yes, twice. I met him once at our Ambassador Carter's house— a social event; and I met with him once with our Ambassador where the discussion was mainly an A.I.D. discussion. We were talking about village assistance, the whole business of different approaches to development. We never did quite work this out fully.

As explained in all of Nyerere's writings, Ujamma means "familyhood"—a socialization process that is distinctly African. His idea was to upgrade existing rural villages and to relocate villages if areas were overpopulated. It implied improvement in social amenities and economic well-being at the village level. However, the unit of progress was to be the group and mutual assistance within the group—family, extended family, village, clan, tribe, nation. This idea contrasts with Western emphasis on the "individual" and individual incentive in pursuit of profit.

Q: You didn't accept the Ujamma policy?

JOHNSON: No, as we saw it, villagization suggested force to relocate people. Therefore, we did not accept it, but we tried to be diplomatic. Our projects, as conceived, (training, poultry and livestock production, crop production, development of seed farms, agricultural research, assistance to the university, health care, general infrastructure improvement, etc.) would be helpful notwithstanding ideological preferences.

Q: Generally, you were opposed to the Ujamma?

JOHNSON: Yes, however, some U.S. press persons took issue with the U.S. having any kind of A.I.D. program in Tanzania. After all, the cold war was in full bloom and Tanzania touted its own brand of socialism. Many Americans took exception.

Q: Did you and the Ambassador try to suggest that Ujamma was not a good idea, that you had some problems with it?

JOHNSON: Well, we didn't say, "Mr President you're nuts." From Tanzania's development plan, we simply selected suitable projects. Our projects in Tanzania would have been acceptable to A.I.D. Missions anywhere and, of course, all of them were approved by Washington.

Q: What specifically was the Mission's objection to Ujamma?

JOHNSON: As I indicated, we did not see how the singular concept "people helping people" was a sufficient incentive for development. And, of course, if force was involved, we would not support that. Moreover, the scale of the Ujamma approach was far beyond the reach of Tanzania's available resources considering that village numbers are in the thousands. On the other hand, if any of us had been president of Tanzania at the time, we can only ponder what we would have done to move the country forward.

Q: If you had been president, what kinds of things might you have done for the development of Tanzania?

JOHNSON: First, I probably would have reorganized the government and the economy along more market-oriented lines, and I would have provided for economic incentives, accordingly. However, I do not want to suggest that misguided policies totally explain lack of development in African countries. My opposition to Ujamma should not imply that African countries can easily follow steps such as we have taken in the U.S. Liberia, for example, which has laid no claim to Ujamma or socialism is worse off than Tanzania.

Q: But wasn't there an element of forced settlement?

JOHNSON: Yes, I recall once when the military was involved in forcing villagers to relocate. Because of its nature this action made news. I do not recall another such happening because villages ordinarily remained where the inhabitants (or the Chief) had chosen to locate them. The prime issue under Ujamma was how to improve upon basic human needs in villages.

Q: Why then was there opposition to Ujamma?

JOHNSON: Well, as an instrument of development one could question the approach itself. But beyond this, Nyerere talked about development along a socialist path. The ideology itself became the measure of acceptance. Foreigners discarded the concept on its face rather than on objective examination. Maybe, it was just as well to do so.

Q: But I understood that some villages resisted being villagized? Was that true?

JOHNSON: Partly. Those that resisted were being asked to abandon old village sites where, for example, their ancestors were buried, etc. They resisted being moved. It was somewhat analogous to our placing Indians on reservations away from the ancestral lands.

Q: Have you returned to Tanzania since leaving there in 1977?

JOHNSON: Several times.

Q: What was left of the projects that you assisted?

JOHNSON: Almost everywhere the lesson is the same. Technical projects—seed farms, hatcheries, developed cattle ranches, research laboratories, transport vehicles, paved highways—were all in a state of disrepair, sometimes totally. On the other hand, Morogoro agricultural college had become a full university and, at least in appearance, it had progressed. I am convinced that U.S. institutional projects designed, for example, to improve the structure of education, health, and government itself will be more lasting than other projects.

Q: Well let's come back to that.

Q: (This is April 19th continuing the interview with Dr. Vernon Johnson) You were talking about your work in Tanzania and other development prospects in Africa.

JOHNSON: The main point to be made, I believe, is that Africa, as a development entity, is unique. Nyerere saw this and his central point was that Tanzania, unlike Western economies, was group focused (e.g. the extended family concept) in contrast to having an individual focus. But how does one use this knowledge? Nyerere said we should accept it, assist it, and turn it into a force for development—the base unit of which would be the Ujamma village. He saw Western capitalism as being exploitive and European socialism as based on class conflict. He argues that neither was suitable for Africa.

One of the main problems with Nyerere's thinking is that it was devoid of economic content in spite of his dealing with economic issues. Most classical economic principals to him rested on exploitation and, therefore, should be ruled out. Now for A.I.D., our intent was to be neutral to ideological concepts. We thought that regardless of the ideology a country would need good seed if it was going to have good crops; that it would need good training if it was going to do the things that needed to be done; that good chickens were useful in a socialistic as well as a capitalistic country; that health was a benefit. And therefore we stayed with those project and those ideas that would be useful regardless.

In fact, before the war with Uganda, there was a surplus in the Tanzania treasury. Julius Nyerere was the first head of state invited to the United States under the Carter Administration and therefore the country was not looked upon as a basket case. Although it proclaimed socialism,

it was not looked upon at all in the same sense as we looked upon European socialism and European communism. It was unique from an ideological perspective which permitted us to go along with our projects. We increased our input to the country. Our projects were thought to be reasonably well done; they were judged to be good; we had excellent seed farms, for example, and we were building a seed distribution apparatus that was spread across the country. We were assisting the university; we had agricultural training centers spread throughout the country; we had poultry projects. And therefore we were doing as well there as A.I.D. was doing in many other countries at that point. The development problem with Tanzania as well as many other African countries is that the scale of needs overwhelms available resources. That situation exists even until now.

Q: What was there about Tanzania, at that time, that encouraged the donors; the Scandinavians, the World Bank, A.I.D. thought that Tanzania was the model at the top of the list for major assistance. Why was that?

JOHNSON: At least it had a leader who was articulate, an excellent writer, an excellent speaker who could engage a person in almost any range of discussion. Our Ambassador there at that time, Ambassador Spain, a devoted Catholic— Nyerere, was also a devoted Catholic—would engage Nyerere in discussions on principles of Catholicism. Nyerere was good in making his case. When the Secretary of State Kissinger came out to East Africa, his first stop was in Kenya and the President there, Kenyatta, entertained him with Kikuyu dances with the headdress and the bells on the feet and all the rest. I think maybe the Secretary thought that this was the nature of things in Africa. Then, he came down and sat with Nyerere. We had not developed a clear policy for Africa at all because we had depended mainly on the British and the French in the traditional way. Apparently, the Secretary found Nyerere to be a different kind of African leader. We were told that the Secretary altered his Africa policy speech on the basis of these discussions. Now for your question. The Tanzanian leader was respected, he could penetrate Western thought, and Tanzanian socialism was not taken in the sense that we took European socialism and communism. In terms of Western thinking, Tanzania was devoid of tribal discord. The country was stable and some thought that this might lead to development.

Q: Nyerere was critical of the West; wasn't he?

JOHNSON: Yes, he was critical because capitalism to him represented what he had learned from colonial powers. It, he said, was simply not the approach Africa should be taking and in this sense he was critical. He was not critical of individual people who came; he liked to engage them in intellectual discussion.

Q: You said before that you had met with him several times; what kind of a dialogue did you have?

JOHNSON: It wasn't much of a dialogue; I just went along with the Ambassador to discuss development issues and development problems. And I said a minute ago, our idea was to make sure that we were doing things that would be conducive to development in the country and yet

not get involved in making a better Ujamma village and the kinds of things that were foremost in the ideology. Nyerere completely accepted our points. It was well understood that there had to be increases in productivity and output as there had to be improvements in health and education and all the rest ,if the country was going to develop. So he took no issue with this; he probably would have liked for us to give stronger support to his ideas and find a way to promote them; but we were well accepted in the country despite these differences in viewpoint.

Q: What was the situation in Tanzania that made Ujamma particularly important?

JOHNSON: It was simply an articulation of the President's; it was not different from most African countries. He simply expressed his concept of African history and laid out an historical treatise on things that were African and things that were not African; and he made the point over and over again that colonialism was an implant that was not in the tradition of Africa and that African traditions could be up-dated into a modern developmental frame of reference and promoted it on the basis of group welfare rather than on the basis of individual welfare. So I think it was just one of the few countries that had a person who could articulate ideas that had an appendage in history, culture, and tradition; and very few of the other Presidents made an attempt to do this; were not probably sufficiently endowed to do it.

Q: You don't get the impression the ethnic issues that you saw in other parts of Africa were very evident in Tanzania; is that true?

JOHNSON: Yes, the tribal conflict, in particular. One thing that Tanzania did not have was the dominant tribe. In most of the countries that have had exploitive and explosive tribal conflicts, there has usually been a tradition of the dominant tribe; this was certainly true in Uganda; it was true in Kenya; it was true in Nigeria. Tanzania, on the other hand, was a culture of small tribes. The land space had been such that they had not had the kind of conflict which stems from the distribution of land resources. Religion never became a strong basis for conflict in the country as it did in Nigeria, for example. And with the strength that Nyerere had as a leader, all elements of the population supported him. Thus, Tanzania did not have the basis for conflict that was evident in some of the other African countries. And therefore this contributed to the possibility that this might be a place that could be developed in a more peaceful way.

Q: How did Nyerere articulate the question of how one generates the resources necessary to maintain development processes: the lack of revenue generation, the lack of incentives?

JOHNSON: Hard work on the land. Nyerere's idea was that industry was not critical to commence development. So you start with people on the land. Hard work, gradual accumulation of surpluses, emphasis on marketing and distribution. And from this base a long run approach, at best; nothing was going to happen in a year or two. In the long run these villages would develop; there would be some of the welfare benefits like health, education, and recreation. The villages would develop. Each would have a village government and would develop within a regional or provincial structure. Each village would have its own development plan; this would be articulated within the village. Everybody in the village would be equal in their participation

in the affairs of the village. Gradually resources would be developed; surpluses would be developed. Money could be collected for resources like fertilizer; training would be a dominant element of his vision. In time the people would be better off the country would become better off; surpluses would continue to develop and in this way there would be national development. Actually, very little of this makes economic sense.

Q: Prices didn't have a role in this?

JOHNSON: Market prices were rarely discussed. I don't remember at any time hearing an intellectual discussion of pricing and market mechanisms as a development force. This was one of the blind spots. The force of capitalism was as an ideology and its exploitive aspects were emphasized. The benefits of markets were seldom brought into Nyerere's range of discussion and articulation.

Q: What about exports and imports?

JOHNSON: Analytical economics just doesn't stand out in Nyerere's point of view; to the extent he talked about it, it was usually with reference to exploitation. For example, when he made a speech here at Howard University, he asked rhetorically: how does it happen that a young woman in New York who works in a department store selling twine can live well with an apartment and a car; while the producer in Tanzania who sells sisal, according to Nyerere, can't even afford a bicycle. He related that 20 years before, 50 bales of sisal would buy a tractor; 20 years later it took a hundred bales to buy the same tractor. It was not the market but rather control of the market that kept Africa backward. He had trouble seeing how Africa could develop in competition with Western economies that were so far ahead and where all economic market decisions were made outside of Africa.

Q: Do you have any sense of the impact of the program?

JOHNSON: Yes; the war with Uganda denuded the treasury, although it led to the ousting of Idi Amin. From that perspective, the country began going further backward; there were no internal resources to maintain the projects we left. Nyerere finally reached the point of retirement; new presidents came in with different ideas. The A.I.D. supported projects with an institutional structure have better prospects of permanence than projects that depended on the imports of tools, equipment, technology, vehicles. they are projects that could not be sustained. The seed farms, for example, were tractor operated; beautiful farms like those that you would see in Iowa. The crop geneticist had worked on this and developed new varieties. I went there in 1988—15 years later—nothing was left; equipment gone; seed farm was just a shadow of its old self. Nothing that you could point to. The Maasai cattle project with water development had reverted back to the traditional cattle tending that the Masai had always been accustomed to.

Q: What was the reason for this?

JOHNSON: There are several reasons: one is a lack of a continuing resource flow: the resources that were coming in to sustain these developments were suddenly cut off—A.I.D. resources for the main part. Government resources are much more reliable if there is a complement of outside resources. African government with limited resources simply cannot support these projects. This always presents a problem, particularly when you consider the poverty of most of these countries. If, indeed, we have good projects, we should limit the number and provide support however long it takes them to generate output and income.

Q: There was no institutional structure to carry them on?

JOHNSON: No, not when we view the situation realistically. For example, we had excellent people trained for the seed farms; and as matter of fact they were put in charge before our phase out. But we were running it with A.I.D. support and A.I.D. surveillance. When we left and our complement of resources left, the farm manager's access to the Treasury came to an end. He could not sustain the seed farms which requires timely inputs such as gasoline, replacement of farm equipment, etc.

Q: The government didn't see it as a priority?

JOHNSON: Our concept of "priority" must be seen in Tanzanian terms. Host country support for projects depends on the finance ministry priorities and the availability of funds. The Minister in Tanzania was knowledgeable about finance but ignorant about agricultural needs. For example, if crop inputs are delayed (e.g., sprays) an entire crop may be lost. After A.I.D.'s phaseout, the Tanzanian farm manager being a technician had no clout at the Treasury. So long as A.I.D. was associated with a project, we could go to the Minister and if necessary threaten to cut-off assistance.

A.I.D. should select a few good projects in these low income countries and we should not phaseout such projects until they are firmly integrated—technically and budget-wise—into the development fabric of the host country. "Project phaseout" should be deleted from A.I.D. jargon.

Q: Didn't we attempt to make a big push in the Arusha Region?

JOHNSON: The idea of associating donors with particular regions of Tanzania came near the end of my tenure. I think A.I.D. did later concentrate more resources in that region.

Q: Were you involved in the Zanzibar relationship?

JOHNSON: When I was in Tanzania, our work in Zanzibar was very limited. I think we had only one agricultural technician posted there.

Q: Did you attempt any kind of economic policy dialogue?

JOHNSON: My assignment in Tanzania preceded A.I.D.'s pointed emphasis on policy dialogue. I agree, however, that price incentives and market forces are crucial to development. The primary issue, it would seem, is not simply discussing price policy but rather installing it as an on-going guide for decision-making. Tanzania had economists trained in the U.S. and other Western countries. They were not ignorant of price effects. Bringing a host government to effectively adopt such policies, this is the trick.

Q: Your next assignment was in Washington?

Appointment as Deputy Assistant Secretary in the African Bureau, Department of State

JOHNSON: Yes, in 1977. The war in Zimbabwe had been raging for some time; several years as a matter of fact. And there were strong indications that it was winding down. One of the main propositions was that land in the country would be allocated to the soldiers in the rebel group and that other black Africans would get entitlement to more land than they had. So the State Department wanted a deputy assistant secretary who had an African experience, particularly someone who had knowledge of land tenure and land allocations (I mentioned before that my degree had been in land economics) So Dick Moose (Assistant Secretary for Africa) asked me to come into the Department and take the job there. As it turned out we had nothing to do with the settlement. To the extent that outsiders assisted, the British were involved. But it was mainly a matter of the Ian Smith's government and the Mugabe group working out a compromise. So I found myself back in the State Department not for the purpose for which I had been brought there but as a functioning Deputy Assistant Secretary handling economic affairs in Sub-Saharan Africa.

Q: That was quite a shift from working for A.I.D.?

JOHNSON: Yes, but on the economic side there were overlapping interests. For example, we went through the CDA (Cooperation for Development in Africa) initiative where State and A.I.D. were trying to bring different countries (donors) together—countries that had a mutual interest in developments in Africa.

Q: What was your assessment of that experience?

JOHNSON: I think it was more important to as a prospect of development than we gave it. I was an initiative in which 6 donor countries came together and allocated responsibilities among themselves. If it had been strongly supported, more progress would have been made. Nonetheless, a number of useful ideas were contributed. For example, for purposes of agricultural research we sub-divided Africa into zones. Particular donor countries were to assume particular responsibility for a zone. First, the donor country was to make a resource assessment, an inventory, particularly in agriculture research in its assigned zone. The U.S. became the designated government for setting the guidelines in the Sahel and in Southern Africa. We took careful inventory of all agricultural research facilities in these zones and we documented and summarized all relevant past research. With more than 40 countries in Africa, it was evident that each country could not

have a super research facility, so we singled out the countries where research was most advanced with the view that research findings in these countries could be utilized by nearby smaller countries. We also took note of the universities. It was clear that they were making little of any contribution to agricultural research, although hundreds of African students were going abroad for advanced agricultural training sometimes at PhD levels. The CDA idea of coordinated donor action was sound. We never took advantage of the idea, and later discarded it.

Q: Why didn't it work?

JOHNSON: In Washington, and perhaps in other donor countries, CDA never became a regularized budget item. It had been developed in a ad hoc manner. People at higher levels of State and A.I.D. had only limited appreciation for slow pay-off activities like research. It was not a hot item. Later when the World Bank showed an interest in trying to coordinate certain elements of agriculture, people at higher levels of A.I.D. thought this a good time to bow out. In development, it always has been interesting that much faith is placed in the Bank's technical ability in such activities as agriculture when in fact their knowledge and attendant record in such areas are poor.

Q: Let's be clear on the areas you covered while in State.

JOHNSON: I covered economic matters in which State had an interest. This included trade with Africa, mining, oil production, and economic development, in general. For the latter, I was primarily interested in A.I.D. and CDA which I mentioned before. So from the State Department's perspective, my job was to keep the Bureau updated and to voice opinions and advice on economic matters.

Q: Any particular issues that stood out that you were involved in?

JOHNSON: Africa was not a high economic priority. South Africa and Nigeria were the most important (mining and oil) and we kept abreast of A.I.D.'s activity. Our CDA partners kept us in contact with Canada, United Kingdom, France, Belgium, West Germany, and Italy.

Q: Do you have any views about working in the State Department?

JOHNSON: The view that stood out most was a difference in priorities between State and A.I.D. State's view, in keeping with its mandate, was an analysis of any happenings as it related to U.S. interests, on the one hand, or to a threat, on the other. A.I.D. looks more at economic development prospects and benefits to the host country. The office work procedures are quite similar but the focus and priorities are sometimes at variance.

Q: Do you have an example?

JOHNSON: I think it is more an on-going process than distinct examples. Taking countries, as an example, those striving most to develop, to install good policies were of most interest to

A.I.D. whereas those that voted our way in the UN or which posed a threat (e.g. Libya) were of far more interest to State.

Q: Any particular country comes to mind?

JOHNSON: We talked about Nigeria being favored by A.I.D. in the early days for its development potential. State, on the other hand, kept in close contact with Zaire for its assured support in the UN and as a provider of chrome. The latter benefit was a counter to the USSR which was also a chrome producer.

Q: Did you see any difference in the time perspective between the two agencies?

JOHNSON: Of course, State has been a department since the beginning of our Republic. Within the scope of foreign affairs, its function is to report on changes in host countries and always to espouse U.S. interests on a world-wide basis. These functions do not have time limitations. A.I.D., on the other hand, is still a "temporary" agency. Its units of work are in projects which are time phased. Thus, A.I.D. has a far different time perspective than State. In retrospect, however, one of the weaknesses of A.I.D. is the blind adherence to phaseout dates without an attendant analysis of the host country's ability to carry on.

Q: How does that time frame relate to what you saw in the State Department?

JOHNSON: As indicated, State is more likely to respond to changes in a foreign country's policy or actions such as a vote against important U.S. interests in the U.N. In such cases, State might strongly recommend cuts in aid to that country. A.I.D. tends to resist such on-again/off-again recommendations since they are disruptive to time focused projects. Undoubtedly, such tugs and responses will continue because, as indicated, the priorities are sometimes different.

Observations on selected development issues

Q: What are some of these basic thoughts that you have about development; you mentioned that some countries are not capable of development; what do you mean?

JOHNSON: Using my experience as background, I think it will be useful for me to divide your question between A.I.D. flaws. (conceptual and otherwise), on the one hand, and A.I.D. benefits, on the other. I shall mention the flaws first.

From the beginning our lack of effective knowledge of most developing countries was almost complete. We thought that all we had to do was to transfer resources. This was the height of naivete. Secondly, throughout this interview I have mentioned a tendency of A.I.D. to take on more projects than could be supported adequately. Host country pressure, building a case for a bigger Mission budget, and confusing host country needs with feasible projects—all may explain inflating project numbers. In any case, they diluted our programs. A third flaw and, one already mentioned, is the phasing out of projects before they make a contribution to the host country's

GNP. Before that point is reached a training center or a new seed farm are costs which can only add a burden to already weak treasuries. This latter flaw complements the one of "working oneself out of a job"—the counterpart system. Whatever might have been intended, it never worked as anticipated. A prime reason is that the A.I.D. technician comes with resources— and thus a degree of clout, whereas the counterpart that is left behind has little or no standing with government and has difficulty extracting funds when needed. Finally, A.I.D. has been lured into some projects which by definition are losers; among these are deep sea fishing, forestry, and assistance to nomadic cattle herding. Deep sea fishing is too complex and costly and should be left to private enterprise. The payoff in forestry is too long to be realized, witness the time it takes a tree to mature and nowhere, to my knowledge, have Americans been able to comprehend solutions to problems common to nomadic herdsman. These are but some of the flaws that come to mind.

Q: What benefits can you give that have been derived from A.I.D?

JOHNSON: To begin, A.I.D. graduates—the more advanced developing countries have certainly been helped. Korea, Taiwan, India, countries on the Asian rim, selected countries in Latin America, Ghana, etc. are some that come to mind. Just holding hands during their infancy could have been helpful. In addition, our food aid has maintained a degrees of health and prevented starvation (especially in Africa) while helping to maintain farm prices to our own farmers. Thousands of foreign students have been assisted to obtain a U.S. education. Many of them can now make a contribution to their own countries and most of them are staunch U.S. supporters. U.S. businesses and U.S. universities have benefited in that almost all equipment used by A.I.D. is U.S. manufacture and universities have been assisted via research grants and contracts. These are but some of the benefits.

As an interview windup, I think that competent young people who think of A.I.D. as a career will not be disappointed. That certainly was my own experience. Host countries have been benefited and the U.S. is far more knowledgeable about the world than it could otherwise have been.

End of interview

ANNEX: Size of Farms and Agricultural Development in Africa
Dr. Vernon C. Johnson
May 16, 1994

African countries have had little success in achieving growth in agriculture. With few exceptions most countries are falling further behind. Per capita food production, for example, has declined over wide areas despite more than 30 years of independence and economic assistance from the donor community.

The most glaring and frustrating problem in this regard is lack of progress among Africa's small-scale farmers. Since the vast majority of farm operators are in this category, and since agriculture is by far the dominant industry, it must, by definition, be the major engine of growth. The point to underline is that unless these farmers become more productive, agricultural decline will continue.

Farm size

In the literature and orally a lively debate over the years is whether small farms or large mechanized farms should be the preferred unit of production. Most non-African advisors charge that in the rush to develop, African governments have mistakenly invested too heavily in large-scale farms with the belief that both modernization and efficiency can best be realized from such investments.

Where large (especially parastatal) farms exist in Africa their dismal record provides all the proof needed to oppose them out of hand. Donors list capital shortages, poor management, and foreign exchange needs as dominant constraints at this scale of operations. Almost universally they recommend small-farm development strategies, not only as a rational economic choice but also as a physical necessity in light of growing population pressures in some countries on limited arable land. In support of small-scale farming, it is also recommended that donors should engage African governments in policy dialogues to encourage freer markets and to provide "suitable technologies" for enhancing productivity. In short, the structure and scale of Africa's farms need not be changed in order to realize acceptable economic growth.

Observation

The trouble with these recommendations is that we are approaching a half-century of African independence and donor support and, until now, nobody has been able to find the pearl of "suitable technologies" in the small-scale farm oyster. Nor, in our view, are such findings likely. As organized and practiced, small-scale farming in Africa is sufficiently different from small-scale farming elsewhere as to limit absorption of the technologies recommended. The reasoning of this statement is treated in the discussion below.

Small-scale farming

A typical African farm is a plot of community land operated through use rights (not ownership rights) by a nuclear family which, as part of an extended family, lives with other families in a rural village. The family's cultivated land in a given year would not exceed 2-5 acres (including

so-called cash crops—coffee, cocoa, peanuts, cotton, etc.) By custom the "farm" is laid out not in a single field, but rather in several small scattered parcels of land which are part of larger areas (called brakes) which surround villages in a rough circle. Assuming four "brakes" of farmland surrounding a village, all village families cultivate their plots, say, in "brake I" several years, i.e., until natural fertility and thus plant growth decline. Farmers will then shift as a group to "brake II" and so on leaving "brake I" in "bush fallow" (rest period). In time farmers, as a whole, will gravitate through "brakes III" and "brake IV" back to "brake I". This common practice of rotating land (rather than crops) between cultivation and fallow periods entails the widespread practice of "shifting cultivation" which in the absence of purchased inputs (e.g. commercial fertilizer), chemicals, etc.) is the traditional way for maintaining soil fertility. However, in countries witnessing population pressure on land, cultivated plots become smaller and fallow periods are shorter. With less time for natural restoration of soil nutrients, production per unit of land begins to decline.

The paragraph above is only one of many unique features of small scale farming in Africa; and it suggests different assessments of rationality when seen from opposite sides of the development problem. Donors urge use of modern technologies; yet non-availability and price place most modern technologies beyond reach of isolated and impecunious farmers. Shifting cultivation, as a substitute for commercial fertilizer, therefore, is a rational economic choice for them; but, as viewed in terms of long term growth, it is an agricultural disaster.

The remainder of this paper discusses future needs within the context of small farmer concerns.

Future needs

1. Need for a Changed Image: The first observation is conceptual—an analytical need to view small-scale farmers in Africa from the perspective of resource-using farm managers rather than a common mass of humanity as seems commonly to be the case. Concomitantly, their farms in the framework of development should be treated as small business enterprises. From this baseline, questions would be whether recommendations being offered small scale farmers bear acceptable risks. Since most recommendations imply use of unfamiliar, purchased and usually imported inputs, risks during a farmer's initial adoption period may be too high to be assumed.

If these perceptions have merit, a job for agricultural researchers and trainers is to teach farmers to use accessible low-cost, yield-increasing local inputs with a minimum blend of critical inputs from outside. Of the latter inputs, commercial fertilizer is an example. As for local improvements, green manuring, planned rotations with leguminous crops, recommended plant spacings, clean weeding, recycling village wastes, more drought tolerant crop varieties, better (and better care of) hand tool and animal traction to enhance labor productivity, and improved water conservation and management would all be practices with low money costs. They track well with farm management practices which have had a measure of success elsewhere.

2. A Need to Reexamine Farm Size: If today one returned to an African rural village after, say, a 20 years absence, rather than increasing yields and self-reliant farmers, he would more likely find stagnant or decreasing yields and growing dependency. Over many years traditional African

farming became institutionalized in a way that fragments land and creates a treadmill effect for farmers. Even in land-abundant countries such as Zaire and Tanzania, the size of farms approximate those in countries where arable land is scarce. The limited resources available to village farmers (human muscles and hand-tools) ensure farms that are so small and so poorly tended as to thwart any substantial productivity increase.

The historical design of traditional farming is itself the dilemma. There is little incentive for farmers to invest in yet an additional hand-tool or more of the same low quality seeds. The marginal rate of return on such investments approaches zero. Along with task improvements such as better water management or crop rotations, farmers must have inputs from outside of rural villages (e.g., commercial fertilizer). But who is to provide them? Private enterprises servicing farmers are too few to be of meaningful help, and small farms and farmers are spread too widely over a country to be serviced adequately by weak governments, donor assistance notwithstanding. What we have in Africa is a crude economic equilibrium at a very low level of production, and we are afraid that this condition will persist until basic structural change is adopted.

A Possible Approach

In the future, agricultural research and practices in Africa should shift more toward land issues and farm management problems—land capability, land use, land tenure, soil conservation, and particularly how to increase the productivity of farms as business enterprises. When problems are put forward in development literature, it is too often a small farms vs large mechanized farms issue. What about all the farm sizes and levels of technology in between? As noted, no substantial agricultural growth will occur on Africa's poorly tended 2-3 acre farms. Therefore, farmers with an incentive for change should be assisted to move their operations from the present 2 acres under cultivation to 5 acres, on to 10 acres and eventually to 50 acres or more. At present neither available technology nor the institutional/legal structure support this prospect. As noted, small traditional farms are treated as given. When their feasibility is questioned, responses usually are: 1) that small farms do well in Asia, why not in Africa, 2) that acre for acre small farms yield higher than large farms, and 3) that, with growing population pressure and very limited employment opportunities elsewhere, the only realistic option for farmers is to stay in their villages and raise productivity there.

Our comments on such statements are provided in reverse order. First, migration from farms in Africa already is an on-going and accelerating occurrence and is common to agricultural development worldwide. Why must Africa be different? Also, wage employment on private commercial farms already is considerable in some countries (Zimbabwe, Kenya, Ivory Coast, Zambia, South Africa). As farms become larger, hired farm labor could become a growing source of income. Moreover, most of Africa's arable land at any given moment is in bush fallow with the hope of regaining fertility for the next round of cultivation. If research could replace these fallow areas with commercial crops, they could absorb more labor and active farms could be larger. Second, whereas higher yields per acre are recorded on small farms in many countries, it does not, as a general rule, apply in Africa. Privately operated farms from lower medium to larger commercial farms consistently yield better than small traditional farms or large parastatal farms. This is true whether under European, Asian, or African management, or whether in South

Africa, Kenya highlands, Zimbabwe or Ivory Coast. For one thing, larger farms can rest on a firmer economic base and untangle themselves from the malaise of traditional subsistence thinking, and their operators are most able to help themselves (transport, cash, or credit purchases of inputs, etc.) Finally, to compare small farms in Africa with small Asian farmers is inappropriate. For the latter the soil generally is more fertile, cropping is of a different mix and far more intensive, irrigation is widespread, the social base is different, markets and infrastructure (external economies) in general are more widespread, animal power is used throughout, and government support is more reliable.

Conclusion

The thrust of this short paper is to suggest that the overarching agricultural problem in Africa is how to modernize traditional village farming—legally, institutionally, technically, socially, economically, and psychologically. The profusion of village farms are currently too small to provide family savings for capital growth, too isolated, too technically deficient, and are spread too widely to be assisted by cash-strapped African governments. The need, to repeat, is neither the typical garden-size village farms nor large parastatal farms but rather to promote varying sized commercial farms that permit progressive farmers the chance to grow by means of enlightened farm management practices. Admittedly, this will turn age-old social structures in Africa (with their build-in social security systems) up-side down. On the other hand, the more progressive farmers will be able to break out of the traditional straight jacket to cultivate more land by shifting from muscle power to animal power and combustion power. They can procure needed inputs. Meanwhile, some farmers will continue to farm on a subsistence basis; others will hire out their services to larger farmers or migrate to towns and cities with the hope of finding employment.

As a parallel to such revolutionary changes on farms, development industry in Africa must be augmented. The mini-enterprises of market women should be better understood and assisted financially. On a larger scale, food technology and the processing of agricultural products should keep pace. For example, maize (corn) is grown widely over Africa, but it usually undergoes only one process, i.e., grinding or pounding before being consumed as human food. Thus, very little additional value or employment are generated. By contrast in the U.S., corn is processed into numerous products (cereal, syrup, starch, animal feed, fuel for cars, etc.) and each derived product stretches demand and generates additional employment and income.

Regrettably, traditional village farming in Africa, based as it is on hand-tool capital, bush fallow, and shifting cultivation, is a sure prescription for continuing economic decline and the inability of Africa to feed its people. Unless real changes are made by way of farm restructuring, processing, and market expansion, no growth will occur.