

Technical Assistance in Agricultural Development¹

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World hunger is much in the news today. We read and hear about food shortages. We read about millions of subsistence farmers in many countries who are unable to meet their families' food needs. We read about the exploding populations and the serious food problem in India. The U. S. A. and the world are facing a major challenge—closing the gap between the have and the have nots—the rich and

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the poor countries. The tragic war in Vietnam, the problems of the Dominican Republic and the serious food shortage in India are all related to the problems in the countryside and their relationship to the political, economic and social issues of the day.

In his recent State of the Union Message, President Johnson said:

“This year I propose major new directions in our program of foreign assistance to help those countries who will help themselves.

“We will conduct a world-wide attack on the problems of hunger and disease and ignorance.

“We will place the matchless skill and the resources of our own great America, in farming and in fertilizers, at the service of those countries committed to developing a modern agriculture.”

Despite all we read, and hear it is still almost impossible for many of us to understand what life is like in most parts of the world.

Imagine that your yearly income is below \$100. You live in a shack with no bathroom, no running water, no electricity, no furniture save a table and one chair, a meager supply of poor quality food.

Imagine no newspapers, magazines, or books—no money for them; your family can't read anyway.

Imagine your nearest clinic or hospital 10 walking miles away; a midwife in charge instead of a doctor.

Imagine expecting to live only 30 or 40 years.

Imagine daily facing hunger and the drudgery of unrewarding labor.

Half the world lives this way. Of all the people in Africa, Asia, and Latin America, 80%

have inadequate or unsuitable food for good health. Over 1.5 billion people in these areas of the world are undernourished.

We know that hunger can be lessened when those who have an abundance give food to those who have too little. In the U.S.A. we have developed the Food for Peace Program, and we cooperate with our fellow members of the United Nations and of FAO through the World Food Program. Sharing abundance not only can relieve hunger and promote better nutrition but also can be directed toward encouraging overall economic growth.

But we also know that food aid cannot by itself solve the problem of world hunger. World hunger can be finally solved only where the food deficits are. The hungry nations themselves will have to do much of the job. We in the well-fed nations can help overcome the difficulties. I am optimistic that they can be overcome, based on three reasons.

First, a real breakthrough has been made in public awareness of the importance of the job to be done. Americans are beginning to realize that, in a world where all countries depend on each other, the future of highly developed and of newly developing nations alike depends on victory in the war against hunger.

Second, we know how to produce abundantly. The greatest and most far-reaching explosion taking place in the world today is the explosion in scientific knowledge. Now, we must learn how to use this new knowledge to bring about the needed increase in food production. The skills can be taught; the technology can be adapted; more research can bring even greater progress.

The third reason for my optimism arises out of the conclusions of a new USDA study of 26 developing nations. It reveals the startling fact that 12 of these 26 are already increasing their ag-

ricultural production at rates far higher than those ever achieved by the highly developed nations, including our own.

The experiences of these countries present valuable evidence on possibilities of improving agriculture in less developed countries generally. They demonstrate what *can* be done. Their value as examples is enhanced by the large differences among them in many factors crucial to agricultural progress.

Some of these countries are tropical, some semi-tropical, and some lie in temperate climates. They differ in their potential for expanding farm acreage and in level of economic development. Some have had much lower per capita incomes, much lower levels of literacy, and much poorer education systems than others that have improved their agriculture very little.

The common factor that seems essential to success is a national determination to improve agriculture—strong enough to adopt policies and programs that make the most of existing resources. Geographic, economic, and social conditions, as well as land, labor and capital—these are important factors, but by themselves do not have the power to determine a nation's growth, either in agriculture or in general economic development. It is rather the responses and adaptations to those conditions that determine progress and a national will to move ahead.

Clearly, food production can keep pace with the rapid growth in population only if farmers in these countries can economically raise their food output per acre as well as open up new lands for cultivation. This requires widespread know-how of modern agricultural production—know-how which most of the developing countries do not now have, and it takes enlightened agricultural policies by their governments.

In the tradition of the American farmer to "lend a hand" to his neighbor, the U.S.D.A. is cooperating with the Agency for International Development and other organizations in sharing with these countries our great wealth of agricultural knowl-edge.

Through its more than 100 years of service, the U.S.D.A. has acquired much knowledge and experience that is vitally important to agricultural progress in developing countries. We have know-how in agricultural economics, supervised credit, agricultural research, forestry, marketing systems, cooperatives, and soil and water conservation. This know-how is what many countries lack.

To use effectively the many resources of U.S.D.A. the International Agricultural Development Service was established in 1963. IADS, as it's called, has the task of coordinating the Department's international technical assistance and training work. It works closely with the Agency for International Development and with our great State and other universities, international organizations, foundations, and other private institutions also providing agricultural assistance abroad. IADS evaluates requests from AID, helps draw up plans for filling them, and then helps in carrying them out.

We in the U. S. A. take for granted many of the foundation stones upon which our modern agriculture stands. Our people can read and write. We have agricultural schools, we have county agents, our government and industry carry on agricultural research, a farmer can borrow money from a commercial bank and many other places, and most farmers in the U. S. A. have a market for their products.

We have county and State boards of agriculture and, of course, a Federal Department of Agriculture.

And, finally, our agriculture rests upon the public policies and legislation which include ownership of land by those who work it, a democratic government, and a free enterprise system in which the workers and the businessman receive the rewards of their labor and investment.

These are the kinds of basic institutions which our U. S. technicians are attempting to provide as part of a coordinated plan under the umbrella of AID and international assistance agencies. In U.S.D.A. we are concentrating our international technical assistance efforts in four general areas:

1. *Education and training.*—Last year, U.S.D.A. coordinated training of over 4,000 agriculturists from 118 countries, and we sent out almost 200 technicians to 26 countries. Of the trainees programmed and supervised by U.S.D.A., 220 studied agricultural economics, 272 studied agronomy, 170 studied animal husbandry, 201 studied extension work. Most were sponsored by AID, which sponsors most of the international technical assistance and training work in which U.S.D.A. is engaged. Of course, we don't do all the actual training. We have many partners to help train these participants; state universities and other institutions, over 300 private companies, farm organizations, cooperatives, and others.

All education in agriculture, of course, is not done in this country.

In Nicaragua, for example, a range management specialist (Gerald Darby, formerly district conservationist, Austin, Texas) began an assignment in May 1965. He is conducting a series of short courses for ranchers and government officials in that country, and introducing improved pasture plants. To us, the job may seem simple, but to the Nicaraguans, he is a real pioneer. Native grasses in Nicaragua are short, provide little feed and dry up during the six-month dry season. Darby is getting several varieties of improved seed, including several legumes, from his parent agency, the Soil Conservation Service. He expects them to provide more feed during the rainy

season, and get through the dry season in good shape.

He is also holding a series of short courses, demonstrations, and field trips to show the ranchers the results of controlled grazing and improved range management. He reports he is getting excellent cooperation from the ranchers on the field days and field trips he conducts, and he has already translated several U.S.D.A. publications into Spanish to get his message to more farmers. This is only an example of the many hundreds of technicians from U.S.D.A., universities and other agencies cooperating with AID on technical assistance programs.

2. *Agricultural institutions.*—One of the institutions we are trying to build is credit. A typical farmer in many less developed countries often pays 20 to 200% interest on farm loans—if he can get a loan. Sometimes, a third to a half of his crop goes to the village moneylender. So he lacks motivation to increase crop production—because the moneylender will get the extra yield.

The Farmers Home Administration, in U.S.D.A., has 30 years' experience in lending money to low income farmers, and supervising their farm management. Such supervised credit is just what many less developed countries need. Twenty-two countries have made FHA-type credit available to rural people; seven other countries are setting up such programs. In the past years FHA credit consultants have been on 63 assignments in 35 countries.

In Jordan, for example, an FHA official helped start the "Agricultural Credit Corporation." It has made loans to 115,000 Jordanian farmers. FHA experts are still advising this organization.

In addition, FHA trains agriculturists from abroad—right here in the U. S. A. Last year, FHA training courses were held in 36 states for 481 representatives of 61 countries, mostly from South America and Africa. These folks attended classes, worked in county and state offices, and visited farmers, accompanied by the county FHA supervisors.

We are helping many other agricultural institutions get started—experiment stations, agricultural colleges, extension services, cooperatives, and marketing organizations.

In El Salvador the typical vegetable producer picks his crop, fills a sack, walks to town, and sits at the curb, bargaining with housewives much of the day. The need for a new system is obvious. A U.S.D.A. market expert is now in the midst of plans and loan applications for a central market where farmers will be able to ship their crop, have it graded and sell it for uniform prices.

In Brazil, a market news man from the Department is setting up a government system for reporting farm prices, so that the farmer who has produce to sell will know what prices other farmers in the area are getting. In the U. S. A. we take this for granted, but to the struggling farmers in remote Brazilian villages such information can mean the difference between hope and despair.

3. *Administration and management.*—Over ten years ago the U.S.D.A. Foreign Training Division recognized the need for trained administrators in the less developed countries. In the mid-1950's we set up a special course in "Public Administration in Agricultural Development," one of almost 100 group training programs we conduct. Students include Extension heads from Indonesia, India, Lebanon, Nigeria, and other countries. They comprise Directors of Research, Senior Foresters, college Department heads, Conservationists, Directors of Planning—a total of almost 200 officials.

These are the men who return home either to do a better job, or to move on to more responsible positions. These are the officials who will eventually make policy decisions which may affect food supplies for hundreds of millions around the world.

We also send technicians out to other countries to advise on better administration. Last month, a two-man team returned from Paraguay, where they studied and consulted on reorganizing the Ministry of Agriculture in that country. They found that the Ministry of Agriculture budget amounted to only 2% of the total national budget, whereas agriculture contributed 36% of the Gross National Product.

4. *Public policies and legislation.*—The fourth broad area in which we work is that of public policy toward agriculture. In the less developed

countries, most people are farmers—as many as nine out of every ten in some countries, compared to less than one out of ten here in the U. S. A. Yet these countries lack a public policy to strengthen agriculture. Land ownership tradition often makes it difficult to lend a farmer money, because he does not hold title to his farm. Little or no public funds are allocated to vocational agriculture schools. Sometimes farm prices are kept low in order to placate city populations.

India is a good example. The Indian Government purposely kept a ceiling on farmers' prices in order to keep retail food prices low. Naturally, this was a disincentive to farmers to increase their agricultural production.

Two years ago, when Secretary Freeman visited India, Government officials asked for information about our price support system here in the U. S. A. The Department sent several of its top people to India, and helped set up a Food Corporation, which provides minimum prices to Indian "cultivators" to encourage increased production. With a better price incentive, it is hoped that Indian farmers will risk purchasing fertilizer, improved tools and better seed, which should bring higher yields and higher total production to feed India's 500 million people. This comprehensive task in agricultural technical assistance requires the full support of our great agricultural institutions; U.S.D.A., state universities, foundations, private industry, voluntary agencies, and others.

The great frontier for agricultural development is in the tropical and subtropical countries. Considerable knowledge is available which can be applied in these countries provided adequate testing is done under local conditions. At the same time, research and education efforts must

receive increased attention. Hundreds of millions of acres of uncultivated lands in the tropics will require intensive research to make them produce more than a subsistence living.

And, research is not always the answer to an immediate problem. It offers hope, however, for future generations. And the value of technological advancement is most apparent. There is a tremendous need for research in developing nations, and it is discouraging to see how little is being done. In many emerging countries there is not one effective experiment station in operation, or even planned on paper. Seventy-five years ago each of our States had at least one experiment station in full operation.

But research alone is not enough. The results must be made known and put to use. The Extension corps has the job of persuading farmers to give up outmoded habits of cultivation and turn to new methods. Farmers, like everyone else, will not try out the new until they are convinced it will mean improvement, specifically, a higher income and a better life.

All these aspects of international cooperation are directly or indirectly concerned with supplying man's basic need for food and fiber. The need for food has influenced human development since before the dawn of history. But today it has a new urgency, a new imperative.

This new urgency results from accelerated rates of population growth coupled with the fact that food production has not increased enough to meet growing needs. Small gains in food output are quickly absorbed by increasing numbers of people and by rising incomes.

We must not forget that the less-developed countries are primarily agricultural. To strengthen their economies, they must improve their agriculture and develop the rural sector. As a great nation and leader in the free world we in the U.S.A. are obligated to help. It is morally right and is in the interests of world peace. And it is to our own self interests. As nations become economically more sound they become better customers for our products—agricultural as well as industrial.

In 1965, we exported over 6 billion dollars worth of our agricultural products. This year we shall export even more. Japan, to whom we provided technical and food assistance just a few years ago, is our best cash customer for our farm output—700 million dollars last year. Other countries such as Spain, Italy, Taiwan, whom we have helped in developing their agriculture are now commercial customers for our food and fiber. Recent studies by the Economic Research Service show that as a developing country increases its per capita income by 10%, they buy 14% more of our agricultural produce.

The problem of agricultural development, then, is one of the major problems the world faces in the years immediately ahead. For our own security and economic interests we must help these emerging nations develop their agricultural potential—from a humanitarian standpoint, we cannot let them starve.