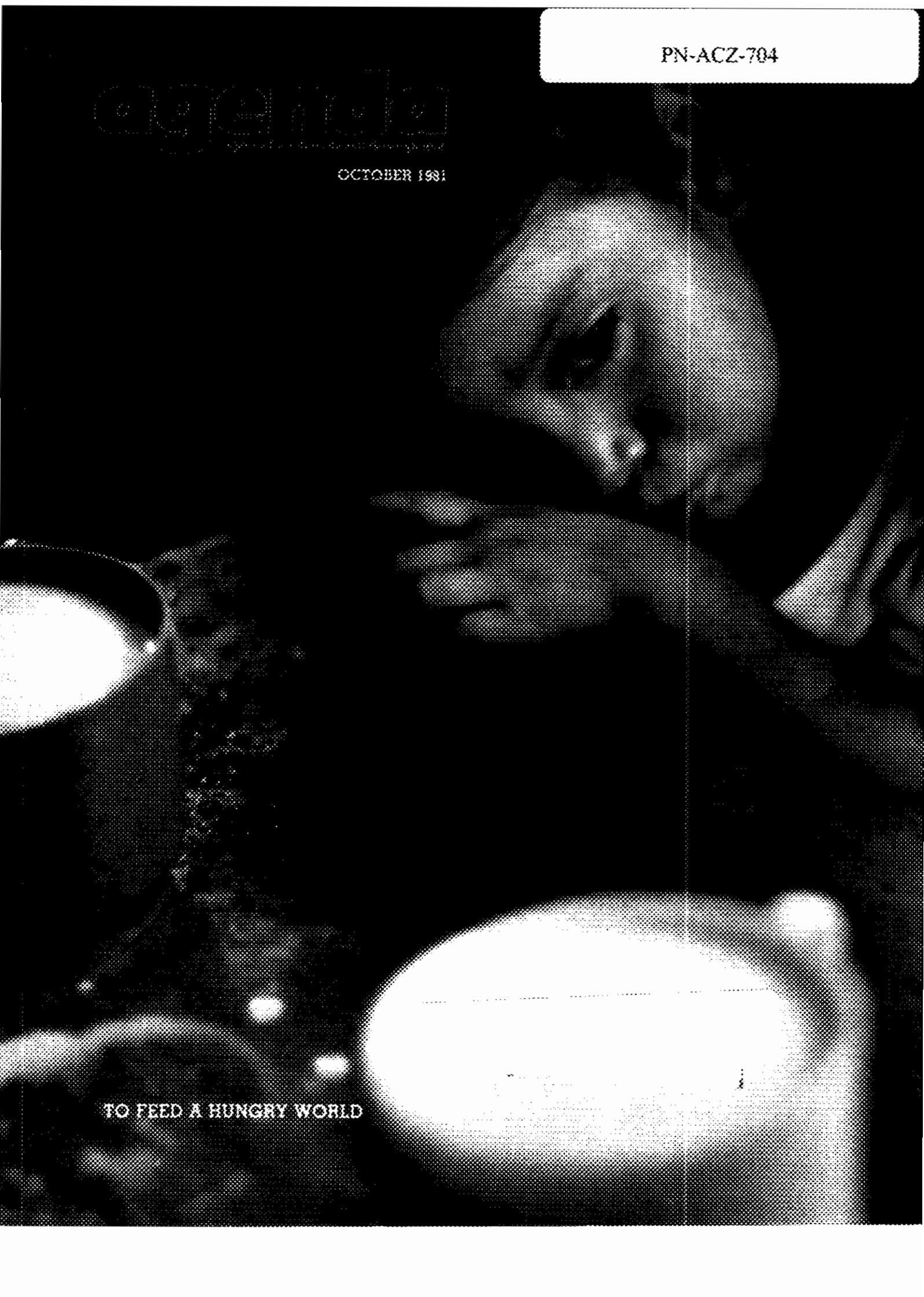


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OCTOBER 1981



TO FEED A HUNGRY WORLD

# DEVELOPMENT UPDATE

**This year the world lost** two men deeply committed to wiping out famine and hunger. Their contributions are their memorials.

**Sterling Wortman**, plant geneticist and leader in the Green Revolution, died May 26, at age 58. He helped found the International Rice Research Institute (IRRI) in the Philippines and the International Maize and Wheat Research Center (CIMMYT) in Mexico, two institutes in the AID-supported Consultative Group for International Research. His success in helping develop high-yielding "miracle grains" won him the 1975 Jacob C. Wilson award for achievement in International Development.

**Harry Chapin**, singer and composer, who gave away as much as \$8 million in proceeds from his concerts to causes—mostly hunger—died in an auto crash July 17, at 38. Known to millions for such popular songs as "Taxi," and "Cats in the Cradle," Chapin became involved in fighting hunger in 1973, at the time of the Sahelian drought. His influence helped bring about World Hunger Year, an educational organization started in 1975; the Food Policy Center; the Presidential Commission on World Hunger and the Hunger Elimination Act of 1981. A memorial fund to continue Chapin's crusade has been established. Electra Records, one of the companies that recorded his songs, has donated \$10,000. Contributions may be sent to PO Box 538, Huntington, NY 11743.

**While food shortages persist** in 22 African countries, reports from other parts of the continent seem to herald an end to the two-year drought. For the first time in three years, most countries in southern Africa are harvesting a good grain crop and in most of West Africa and the Sahel growing conditions are normal or favorable, reports the U.N. Food and Agriculture Organization. Countries still afflicted by adverse crop conditions include Angola, Mozambique, Ethiopia, Tanzania, Morocco and Madagascar.

Rain—in some cases to flood proportions—has fallen in Djibouti, Somalia, Kenya, northern Uganda and southern Ethiopia. But persistent pockets of drought together with flooding, streams of refugees and the slow arrival of food imports and aid to replenish exhausted stocks have kept millions of Africans on the edge of hunger, FAO reports.

**World dominance** by the United States in the export of certain agricultural commodities is increasingly seen as a possible source of economic and diplomatic strength. Such exports in large quantities, for example, helped cushion the U.S. economy from the effects of increasing prices for imported oil. But serious concerns have been raised about the ability of U.S. agriculture to provide long-term sustainable production at prices that people—in this country and abroad—can afford. Will future supplies of land, water and energy be enough? Will production be reduced by climate change, declining soil fertility or pest infestations? Will agricultural research continue to provide ways to increase output?

# agenda



Cover: October 16 has been designated World Food Day. Then, as on any other day, millions of children throughout the world will go to bed hungry. Millions will die from malnutrition. And that day, as on any other, the United States, through public and private voluntary efforts will be working to save them. This issue is devoted to discussions of those efforts.

Cover Photo: Marty Nordstrom

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# WORLD FOOD DAY

by M. Peter McPherson



**D**espite increasing world food production, more than 800 million people are seriously undernourished. Half these hungry people are children less than 5 years old who will bear all their lives the physical and mental scars of this early deprivation. Lack of money to buy or grow food and the difficulty of storing and transporting it are the major causes of hunger.

Not a pretty picture. But it is one that all nations must face, especially as we approach World Food Day, Oct. 16.

Food deficits in the Third World are expected to get worse as Third World populations continue to grow. Of particular concern are the African countries. Africa has the highest yearly rate of natural population growth of any developing region, averaging 2.9%. That growth is expected to continue because the factors encouraging high fertility will change very little. Africa is also the only region of the world where per capita food production has declined over the past 20 years.

So long as hunger and disease are the rule, economic and social development cannot take place and millions of people will continue to live in poverty, deprived of basic human needs and dignity. When people are hungry they become dissatisfied and unhappy. Often, this unrest leads to political instability. Upheaval in the Third World inevitably has an effect on the United States, which depends on these countries for natural resources.

The long-term answer rests with the developing countries—they must meet their own food needs. And they can; the Third World contains more than 70% of the world's arable land.

Better and more food will ease but not solve development problems. If people cannot afford it, all the food in the world will do them little good.

The causes of hunger are complex and have economic, political, social and cultural dimensions. The alleviation of hunger is equally complex,

involving not only increased food production but higher incomes and better nutrition, health and other needs. Population growth and resources management are also part of hunger's equation.

Recognizing the complexity of the problem, AID coordinates its programs in agriculture, rural development and nutrition. Nearly 200 agriculturalists—including agronomists, project managers, livestock advisers, extension advisors, irrigation experts and others—are in Third World countries, working with the Peace Corps and U.S. private voluntary organizations.

To increase agricultural production and incomes, AID programs improve poor farmers' access to credit, markets and technology, AID seeks to promote innovations that encourage self-help efforts, such as the Mahaweli Basin new land irrigation project in Sri Lanka. An AID loan to that country will directly benefit 15,300 small farmers and landless families, providing them with technical production and marketing services, fertilizer and seed.

In many developing countries, significant increases in agricultural productivity can be made only through new knowledge and improved technology that permits higher output per unit of limited resources. There is considerable evidence that some of the highest returns on investment in agricultural development result from agricultural research. New technical contributions to solving agricultural problems are being advanced through the Title XII Food and Agricultural Development Program, which brings agricultural research, education and production expertise in U.S. universities to bear on the world food problem. Through this collaborative program, AID is funding research on small ruminant animals and sorghum and millet—the meat and grain source for the poorest of the poor—and is planning activities in soil management, integrated pest management and post-harvest

food losses, with plans for more projects. An example of the AID-university effort is South Dakota State University's work with the Botswana government to create a locally staffed training facility for agriculture, animal health and community development.

Other agricultural activities assisted by the agency include helping Indonesian farmers terrace their farmlands so excess water will flow to a nearby ditch instead of rushing down a hill, carrying away topsoil.

In Nepal, where 94% of the people survive on agriculture, farmers are testing AID's cereals projects to determine the technology that fits them best. As varieties are perfected, additional food crops introduced and more effective growing methods adopted, production is increasing and the farmers' lives and those of their neighbors are improving.

Efforts such as the one I've noted may mean the difference between life and death for a lot of people. It's important that the United States—for its immediate and long-term security needs—continue to provide assistance to Third World countries so they can learn to produce enough food for the well-being of their citizens.

The United States will continue on "World Food Day" as on every other day to work with other nations and international agencies to work toward wiping out hunger. We take this occasion, too, to urge the governments of the developing countries themselves—particularly those with the poorest and hungriest people—to adopt policies best calculated to stimulate and sustain their own development.

We pledge again our assistance to developing countries in initiating and implementing these policies. Cooperatively, we will move closer to the shared ideal of an adequate diet every day for all men, women, and children. The ideals of world peace and the advance of our civilization require that we do so.

Dear Mr. McPherson:

First, please let me introduce myself so you will have some basis to assess what I am writing about and why I am addressing you.

I am presently Professor Emeritus of Rural Sociology at the University of Missouri-Columbia where I have been the past 10 years. From 1951 to 1970, I served as the Ford Foundation's representative in India. Since joining the University of Missouri, I have worked in Tanzania and Tunisia. On behalf of the International Association of Agricultural Economics, the U.N.'s Fund for Population and Food and Agriculture Organization, I organized a symposium held in Rome in December 1976 to bring together the significant interrelationships from the 1974 World Food and World Population Conferences. Also, I have written a book which was published by the Iowa State University Press under the title of "Conquest of World Hunger and Poverty," a copy of which is being sent to you under separate cover.

Since I have worked on food, hunger, poverty and population issues throughout my professional career, I am writing to share with you what I think have been some of the significant conclusions to be drawn from the past three decades, conclusions with implications in selecting agriculture and food-related program strategies for the decade ahead.

1. One of the most important conclusions is that food to feed the people is not so much a production problem as it is a problem of gross inequalities in the developing countries.

2. Hunger has its roots in poverty. People are poor because they are denied either access to production resources or opportunities to work and earn enough to meet basic human needs.

3. Food, hunger, poverty and population are all interrelated.

4. While plans are conceived in material, economic and social terms, their achievement necessitates that all development be accepted as being first and foremost human resource development. Only as people become self-reliant and self-respecting will the material and economic components of development be achieved.

5. The selection of technology in the future must be accepted as an ethical issue. One criterion must be whether it will contribute to a more just society.

6. The implementation of land and institutional reforms and the development of trustworthy institutions to serve all segments of national and rural development must be accompanied by a program of rural and agricultural education for the masses. Only as the rural population becomes self-reliant and self-respecting will the material and economic components of development be achieved.

7. The leadership influencing all phases of development must be self-reliant and self-respecting as being the primary responsibility of the people. Only as the rural population becomes self-reliant and self-respecting will the material and economic components of development be achieved.

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Douglas Ensminger  
University of Missouri-Columbia  
College of Agriculture  
Department of Rural Sociology

# FOOD FOR PEACE: Where Is It Going?

An Interview  
with Julia Chang Bloch

*The following interview was conducted with Julia Chang Bloch, recently confirmed AID assistant administrator for Food for Peace and Voluntary Assistance. A former Peace Corps volunteer. Ms. Bloch has been a fellow of the Institute of Politics at Harvard University, deputy director of African affairs at the International Communication Agency, a training and evaluation officer for the Peace Corps, and has served on the minority staff of the Senate Select Committee on Nutrition and Human Needs. She was born and reared in China and came to the United States in 1951 as a refugee.*

**Q. In recent years it has been said that AID's food aid programs have not received sufficient attention**

**from the top—have taken a back seat to other development assistance thrusts. What is the position of this Administration vis-a-vis PL 480?**

A. This Administration considers PL 480 a valuable resource, an important development tool and a key element of our foreign policy. It is our principal humanitarian response to disasters and refugee assistance.

Peter McPherson has indicated to me that PL 480 must be treated as an equal with dollar assistance programs. Even though food aid does not have the flexibility of dollar assistance, it can still be used as an effective development resource in many food deficit countries if properly planned and negotiated. Food aid cannot operate separately from dollar assistance. The two forms of assistance can and should complement and supplement one another.

**Q. Has the budget for PL 480 programs in fiscal 1982 been increased? If so, what in concrete terms will this mean for the programs?**

A. The Administration's budget initially proposed for fiscal 82 is higher than the fiscal 81 program. However, the final fiscal 82 mark from OMB has not been announced yet. Reductions may be required in order to live within overall budget constraints; therefore, it is too early to be assured of increased levels for fiscal 82. Even if dollar levels are constant for fiscal 82, commodity prices are now lower than in fiscal 81, and we may be able to purchase the same amount for less money. If lower prices do not offset future cuts, then there could be a negative effect on some programs. Therefore, we must succeed in improving the impact of our program.

**Q. What are the Agency's food aid priorities for the 80s?**

A. AID will place developmental uses of PL 480, especially in food production, high on its list during the 80s. In the past, PL 480 was generally viewed as a resource transfer to

maintain levels of consumption and alleviate balance-of-payments difficulties in recipient countries. While this aid is important to the developing countries' nutritional and financial situation, it is necessary to encourage recipient countries to look beyond the resource transfer and emphasize investments which have an impact on production and productivity.

We are reviewing all elements of the food aid program with the objective of strengthening those where greater returns and developmental impact can be achieved through the concentration of staff and dollar resources. Because these resources are limited and declining, marginal or weak programs not only will receive less emphasis but could be eliminated. Terms of sales programs will be re-examined.

We are surveying programs to select those countries where food aid can be employed so as to make a real difference in their food sectors and contribute to self-sufficiency. New initiatives will be applied in these cases.

**Q. There has been mention of "integrating" Food for Peace programs with other development activities. What do you mean by this?**

A. By integration we mean both the planning and implementation of our food and non-food aid programs in a mutually reinforcing way to help recipient countries manage and finance their food requirements and move toward greater food self-sufficiency.

AID has continued to increase its emphasis on the need to integrate its food aid programs into overall country programming strategy. The guidance for the preparation of Country Development Strategy Statements (CDSS) has urged field missions to focus more directly on this development resource and to devise ways to link it more closely and compatibly with dollar-financed aid. Moreover missions have begun to consider methods of strengthening the impact

of Title I and Title II programs by capitalizing on opportunities for the mutual support of these programs.

Integration of development resources is possible at the policy, program and project level. It may be reflected in the linking of important policy reform objectives to both food and non-food aid programs. It may be seen in country programs where food aid facilitates major institutional or policy reform while dollar activities develop infrastructure necessary to support increased agricultural production over the longer term—complementing local currency generated for development by PL 480. Or, food aid may undergird a country's efforts to develop an effective grain stabilization effort, while other forms of assistance might help establish essential storage and marketing facilities.

In all cases, the basic purpose is to maximize the effectiveness and efficiency of scarce foreign aid. In this regard, the degree to which this resource is to be employed as an integral part of country strategy and programming will be an increasingly important factor in determining future PL 480 allocations.

**Q. Food aid in general has received some criticism of late. Providing food has been called counter-productive, a disincentive, a giveaway that leads to dependency. How do you respond to this?**

A. It is, of course, necessary to be alert to the danger that food aid to developing countries will create a disincentive to agricultural production and a dependency on food imports and foreign aid. Therefore, it is our job to program food aid carefully to avoid these dangers. Recipient countries must be convinced that food aid is only a "stop-gap," as you say. The food as well as the resources it may generate must be directed toward achieving greater agricultural self-sufficiency. Governments cannot ignore policy and institutional reform in favor of short-term food aid.

Food aid programs have an important role to play in helping countries become self-sufficient. This is why I have stressed the role of an integrated policy and program approach. By helping a country deal with the uncertainties and dislocations of structural adjustment and policy reform, which could adversely affect food availabilities in the near-term, food aid can, with other forms of assistance, facilitate needed change.

**Q. What can the Agency do to have our own people, in Washington and overseas, treat food aid as a resource—a valuable one?**

A. The Agency as a whole must be made to understand that food aid today constitutes 20-25% of the foreign assistance budget. Given current trends in foreign assistance appropriations, food aid will become increasingly a critical component of development assistance resources—one which cannot be taken for granted. Unless the Agency moves to use food aid more effectively, public and Congressional support for PL 480 may erode, leading to a diminution or loss of a valuable development resource. AID staff people both in Washington and overseas, I believe, are committed to alleviating the problems of hunger and malnutrition. Given adequate policy guidance, programming support and management encouragement, they will respond.

**Q. What are your plans to increase the involvement of private voluntary organizations in food aid programs?**

A. Voluntary agencies have played a key role in food aid during the past 25 years. They have been the principal distributors of Title II grant assistance. AID relies heavily on voluntary agencies to distribute food to the needy in times of emergency. Voluntary agencies must also be viewed as important instruments of development. I do not believe that the full potential of the PVOs has been tapped. Voluntary agencies by

their very nature can contribute to the development of the human resources of developing countries. Many of the U.S. PVOs have indigenous counterpart agencies that have evolved, through participation in food programs, in the areas of agriculture, health, nutrition, rural and community development administration and management.

Voluntary agencies are aware that food is a development resource and are willing to explore means to better coordinate their food aid distribution programs, both private and public. Further, we must work together to ensure that the PVO programs have measurable positive impact, and lead to sustained improvements in the lives of the poor.

**Q. In the coming years, will there be an increased emphasis on helping the private sector within developing countries?**

A. Greater private sector involvement in food aid programs as well as in AID's overall development efforts is being actively encouraged. There has been growing skepticism about the efficiency and effectiveness of a variety of public sector approaches, which in large measure have displaced private sector initiative in developing countries. Where undue interference with free market forces has not been helpful and has acted as a disincentive to domestic agricultural production, we will work with countries to achieve desired structural adjustments. Food aid can play an important role in this process. Countries that are hesitant to ease excessive controls over the marketing of basic grains can be encouraged to do so by the provision of adequate stocks of food to protect against feared disruptions in supplies to urban and rural consumers.

We have noted examples of ineffective government intervention in marketing and transportation. We will seek to focus our policy dialogues with recipient countries on these situations, and support efforts to stimulate private initiative.



# REACHING A CONSENSUS

A recent seminar at ODC outlined problems and solutions.



On June 17, the Overseas Development Council convened an all-day seminar on world food security. One of its major purposes was to make recommendations as to the position the United States might take on the issue at the meeting of 22 heads of government in Cancun, Mexico, later this month. The seminar was off-the-record, so far as individual identification is concerned.

ODC is an independent, non-profit institution whose purpose is to increase American understanding of the developing nations and their importance to the United States. ODC programs in public education, and the analysis of development problems are supported by foundations, corporations, individuals, and international organizations. One of its activities is a program of seminars and discussions on a wide range of issues encompassed within the general concept of international development. The seminar on world food security was part of that program.

**L**everage points for action, long-term considerations regarding world food security, and the U.S. role in the international food system were three main areas of discussion during the day-long session attended by 40 participants from public interest groups, the academic world, and legislative and executive branches of government.

Following are some of the areas of agreement reached as outlined by ODC President John W. Sewell in a letter to President Reagan:

- The decade ahead is more likely to be one of food shortages than of surpluses. Food production is barely

keeping pace with population growth, and as affluence increases in industrialized and developing countries, the pressure on food supplies, food prices and the agricultural resource base in the food-exporting countries will intensify.

- These factors underscore the importance of giving the world food situation high priority on the agenda of the upcoming summit meeting. This conviction was emphasized by Maurice Williams, executive director of the World Food Council, who reported that the 36 cabinet ministers participating in his organization felt that the world food situation is



at least as precarious now as it was a year ago, especially for sub-Saharan Africa.

- Food aid to the food-deficit countries must be continued—and indeed must be increased—as an immediate effort to relieve hunger and suffering, but it should be related more to development goals. Food provided merely as relief can act, and has sometimes acted, to discourage local food production. Some sort of reserve or insurance scheme also may be required for the intermediate period while food-deficit countries improve their food systems, but establishment of a reserve to stabilize market prices for grains seems unlikely at this time.

- The World Food Council's food-sector strategy approach deserves support, as Secretary of Agriculture Block said at the World Food Council meeting in May. Under this approach, individual countries develop national food plans with the assistance of the World Food Council and national and international development agen-

cies. The food sector strategy views a country's food system as a whole and tries to modify it accordingly in order to bring about genuine and lasting improvement in production, distribution and consumption—and thus improvement in nutrition. Between 30 and 50 countries have now expressed their desire to institute such a strategy.

- Scientific and technological advances will be necessary to improve the food situation, but they are not enough by themselves; a food-deficit country's policies and the amount of external investment—either public or private—in agriculture are equally important. The technology introduced must be appropriate, adaptable to the perceived needs of the users and of minimal economic risk.

- In this connection there is a continuing need for research. The intention of the Secretary of Agriculture to increase U.S. government outlays for research was strongly supported, with emphasis on ensuring that a good part of it must be

related to the needs of poor farmers in the tropics, especially for dry-land agriculture.

- Particular attention must be paid to the role of women in the food system; they do about half the producing and nearly all the processing of food in the developing countries, but do not have equal access to land, agricultural inputs and services, or the benefits of an improving food system.

- Liberalizing trade, especially in agricultural products, is of advantage to both the United States and the food-deficit countries and deserves continuing support. We need to sell our food to them, but they cannot afford to buy without the foreign exchange that their exports earn.

- Food should not be used as an instrument of U.S. foreign policy against the weak. Whether it should be used in this way against the strong should depend on its effectiveness—and its comparative advantage—as a policy vehicle.

- U.S. policy should be concerned about the international food situation for the reasons stated by the Presidential Commission on World Hunger: it is in the U.S. economic interest, in terms of moderating food prices and preserving the U.S. agricultural resource base; it is in the U.S. security interest; and it is congruent with U.S. moral and political principles.

- The private business sector must be drawn into the food policy and development area more than it is now. The Hunger Commission's recommendation that the President convene a meeting of business leaders to discuss this matter was endorsed.

In summary, it was the belief of the organizers and the participants, who represented a wide spectrum of expertise and philosophy, that the summit conference will be of great importance for both the industrialized countries of the North and the developing countries of the South in coming to grips with problems of common concern. □

# HOME GARDENS . . .

## Not So Easy

In one Indonesian village, the effort is failing.

by Carol J. Pierce Colfer

**I**n efforts to improve nutrition and provide additional sources of cash income to poor families, developers are seriously considering home gardening. In light of this burgeoning interest, I offer the following "case study" of home gardening efforts in Long Segar, an East Kalimantan village in Indonesia.

I lived and worked in Long Segar from October 1979, through August 1980, doing ethnographic research as part of a project funded by the U.S. Forest Service—U.S. Man and the Biosphere (MAB) program "Consortium for the Study of Man's Relationship with the Global Environment." The project was administered by the East-West Center.

Long Segar is located two days and a night by riverboat from Samarinda, the provincial capital and nearest "urban" market. In Long Segar live approximately 1,000 Christian Dayaks—Kenyah who voluntarily settled there between 1963 and 1972 from the Apo Kayan, an extremely remote area near the Malay-



*In Indonesia, it is the women who tend the gardens.*

sian border. Between 1972 and 1980, Long Segar was officially a "resettlement village." This means that a comparatively large amount of government aid has been available to the community in the form of seeds, seedlings, breeding stock of pigs, cows and water buffalo, tools, village machinery, pesticides, fertilizers, medicines, even money for housing construction, as well as agricultural extension personnel, teachers, and training opportunities.

In November 1979, the vice president of Indonesia, Adam Malik, came to the village. Before he left, he made a gift of cabbage, spinach, green bean, eggplant and cucumber seeds. These are typical vegetables being encouraged for home gardens. Then, after about a third of the rice harvest was lost in December, the government provided several types of herbaceous legumes for the people to plant for food and as supple-

mental, emergency cash crops.

In February 1980, 15 villagers went to Samarinda for training in a variety of farming activities including gardening, and after the training they shared their new knowledge with other villagers. In July, a German aid team began planning some experimentation with multiple cropping systems and expected to provide seeds and whatever else was necessary for success. And in August, a pilot home gardening project focusing on income generation for women was proposed.

The prospects for success were certainly good. But something went wrong.

A month-long research trip to Long Ampung, from which the people of Long Segar came, uncovered a curious fact. The children in Long Ampung are healthier, fewer die in childhood than in Long Segar. In Long Ampung, the diet includes more

"lekai," or rice-supplementing dishes, including garden produce and forest plants and animals. There are many more gardens in the village and these are well-tended. The—at first blush—anomalous reality is that Long Segar, with all the above-mentioned official activity to stimulate home gardening, is less involved in gardening than Long Ampung, which gets none of the same kinds of help.

What happened? To understand that, it is necessary to look at several factors.

The only reliable cash crop in Long Segar is rice. And in an environment where everyone eats rice three times a day, and indeed cannot imagine life without rice three times a day, there is always a market for rice. It can be stored for long periods of time, in huts built high off the ground and protected from rats and mice. And if by some strange occurrence, the rice shouldn't sell, it can be consumed the next year or be divided among needy relatives and friends.

But vegetables are a different ball game. Although home gardens have

been part of the Kenyah adaptation to life in the rainforest, they haven't taken on a whole series of cultural symbols in the way that rice production has. People can tell you exactly how many "kalengs" (an 18 liter container that holds 11 kilos of unhulled rice) of rice they planted and harvested for the past 17 years, for example, but they cannot remember where they made their vegetable garden last year. It's just not important.

There are a few garden areas within the village proper, and people tend to plant a few seeds right around their houses. Fruit trees such as the soursop, pumello, papaya and orange, are planted in house yards and in the forest nearby. Everyone has access to some garden produce, and sharing food is probably the most important value held by the Kenyah. But the lush gardens characteristic of Long Ampung have not appeared in Long Segar.

There are three major areas that have caused problems for the gardening effort in Long Segar: training, production problems and marketing

constraints.

Seeds were brought to the community and distributed to male "household heads;" village men were brought to Samarinda for training in vegetable production and the key farmers in the German aid team's experiments were men. But traditionally women make the gardens. Furthermore, since men traditionally "go on expeditions," which now include wage earning sojourns in distant cities, once they're trained, they may very well leave taking their training with them.

Certainly there are difficulties in reaching women: Fewer women than men know the Indonesian language; women are reticent about dealing with outsiders officials and extension workers often are fearful of trying to work with women.

The second major set of constraints revolves around the production. First of all, rice production is considered the economic core of the community, so other agricultural activities are scheduled around the growing cycle of rice. Rice production is done by shifting cultivation. There are busy times of the year in the fall for planting and weeding, in the winter for harvesting, and in the late spring for clearing new fields for the next season. During these busy times, people go to the fields and stay all week, since the fields are some distance from home. Since school children and many old people stay in the village, it is sometimes possible to arrange for the care of the vegetable gardens, but more often than not, these arrangements are not made.

Fertilizers and pesticides, more necessary for garden vegetables than for rice, usually cost money, and money is in short supply. Even when fertilizers and pesticides are promised by the government, sometimes they don't arrive—usually because of poor transportation. Although Long Segar can be reached in 35 minutes by plane or 10 hours by speedboat, trade is normally carried on by longboat, which takes a mini-

Men receive the training in gardening, but the women do the work.





When the rice is ready for planting, gardens take a back seat.

mum of two days and a night from Samarinda. Although the boats come fairly frequently, there is no set schedule, and if the river conditions are bad, then several days may pass before a boat arrives. And whether or not the longboats happen to be carrying what the farmer needs when he needs it is a matter of luck. During the 1980 season, there was an infestation of grasshoppers. Anxious to control them, the farmers resorted to pesticides they knew were not appropriate, because they had nothing else.

Animals present still another production problem.

The gardens that are not right near the house are likely to be eaten by wild deer or boar. Gardens in the village are subject to the six, free-roaming water buffalo and 11 cows. The village animals were a well-meant gift from the government of

## Programs Are Not Working, Nutrition Scientists Warn

83 countries meet to discuss findings at the XII International Congress of Nutrition.

by Angela Wright

**D**o feeding programs, food aid and nutrition education—all aimed at tackling food problems and decreasing malnutrition in the Third World—work?

No. That was the sobering consensus of some 2,531 nutritional scientists from 83 countries meeting recently in San Diego. They came together for the XII International Congress of Nutrition sponsored every three years by the International Union of Nutritional Sciences (IUNS).

Warning that food aid depresses the local productive capacity and creates dependency, Fred Sai, interregional coordinator for the United Nations University, maintained that it should be given in accordance with people's needs, rather than with the providers' ability to provide certain foods. He went on to urge that nutrition play an important part in all development activities.

Another participant took a more radical stance. D. K. Soedjatmoko,

director of the U.N. University, called for a global food stamp program. Soedjatmoko said the plan should be financed by all industrialized countries, including OPEC members, to "provide a nutritional floor for the poorest of the poor at a feasible cost.

"Moreover an international food reserve is needed to ensure the availability of food at a reasonable cost during shortages."

The conference, which featured 1,100 presentations covering topics ranging from biochemical and clinical research to national food policies, served as a forum for discussions of current world food and nutrition problems and possible antidotes.

For example, in Guyana, nutritional anemias have become recognized as a major public health problem. One study presented points to iron and folic acid deficiencies and intestinal parasites as possible causes.

Dr. John Murray and Dr. A. B.

Indonesia, but the people were not used to such large animals, had no tradition of eating beef, no storage capacity, and no way to get them to their fields. So, they roam. The animals have ruined many gardens since their arrival in 1975.

There is no refrigeration in Long Segar, at least not for vegetables. Although there are three generators, they are used for freezing a local-style popsicle and for village electricity. Consequently, vegetables do not last long.

The closest markets are two timber companies and one plantation. They range from 20 minutes upstream, to an hour and a half downstream. The largest company is the farthest away, and many's the time the people of Long Segar have loaded up their canoes and traversed the dangerous rapids near the camp, only to discover that no one wanted

cabbage that day. Because of the lack of communication up and down the river, there was no way of knowing that ahead of time.

I would like to emphasize that solutions to these problems are quite possible—and can be worked out locally. People who, for one reason or another, are genuinely concerned that a vegetable crop succeed take the time needed to build fences to keep out the marauding cows. Pesticides and fertilizers can be stockpiled in the village. And so on.

But the reality is that right now there are too many constraints for the people to overcome.

When I questioned the villagers, in groups and alone, they said they needed help with everything—durable fencing, reliable delivery of pesticides and fertilizers, help with marketing and credit. They felt that the government had simply dumped

seeds in their laps, and then blamed the villagers when they could not solve the problems on their own.

Kenyah are reluctant to expose women to embarrassing or degrading situations. Nevertheless, community members are aware of, and value women's involvement in farming. When I was about to leave, I asked the villagers what they would consider a valuable project—one that, given the opportunity, I might suggest to churches or other organizations in the United States. They suggested building a dormitory in Samarinda so the Kenyah girls could pursue their education, while living in safe and honorable conditions. □

Carol J. Pierce Colfer is a specialist in Women in Development at the University of Hawaii at Manoa.

Murray from the University of Minnesota Medical School, followed milk-drinking African nomads for eight years. The nomads, say the Murrays, enjoy an unusual freedom from jaundice and hepatitis.

But, say the majority of the participants, without matching methods of producing foods and of teaching principles of proper diet to the culture of people in any given country, there will be no solution to the vast and growing problem of malnutrition.

Take just one example—the West Indies, where some of the mistakes of the past can be clearly seen, according to Dr. Norge Jerome, nutritionist, anthropologist and professor of community health at the University of Kansas School of Medicine. Quoted in the San Diego Tribune, Dr. Jerome says that according to a colonial tradition, cash crops for export are encouraged over food production for consumption at home.

"Traditionally that model brought profits for the mother country," Jerome explains, "but it does not meet the needs of poor who do not benefit from the sales of export items. Under that system, crops such as cocoa, bananas and spices are produced for export and staples such as flour, sugar, rice and even fish—when the seas abound with them—are purchased from other countries."

What is needed, she says, is "to help the people learn to grow crops they can in backyard fashion—to take responsibility for producing their own food."

Emphasizing the importance of using teaching methods that "fit into the culture," she explains in the Tribune: "In the Caribbean, educational information might be mounted on the calypsos. These are ditties, some of them quite catchy, that are formulated and rehearsed each year before festival time. They are then sung throughout the year. They are a

natural form of communication..."

The conference closed on a somber note, offered by John Hawthorne, a professor at the University of Strathclyde Glasgow in Scotland:

"Some analysts have calculated that if there were only about 1 billion people on earth, and if resources were equally shared, all could enjoy a relatively high quality of life." But the world population is now 4.5 billion, and food as well as energy resources are stretched to the limit, he said.

"One action that is needed," Hawthorne continued, "is for man to control his numbers." Yet that will be perhaps the most difficult task of all. "Ultimately it is up to each individual to reduce population growth. Clearly, if man does not control his numbers, nature will." □

Angela Wright is a public information officer in AID's Office of Public Affairs.



**F**  
**DUCTION:**  
**More Than**  
**Just**  
**Farming**

by William L. Rodgers



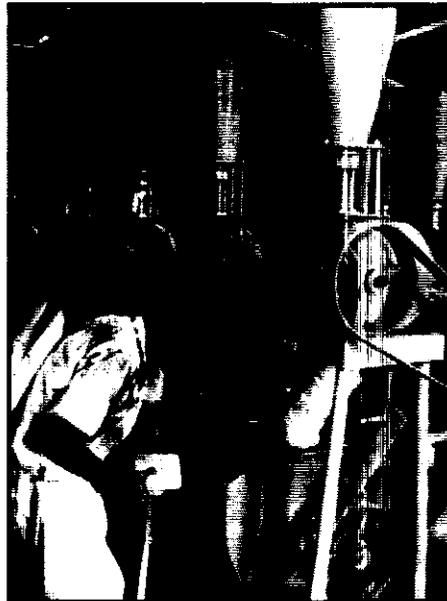
Storing corn for later sale.

**E**fforts to improve the world food situation have focused primarily on increasing production. In reality, however, a nation's food system depends on several other interlocking functions as well. As food technologists understand better than many development economists, the fruit of a farmer's labor does not end up on anyone's dinner plate until it has been processed, distributed and, finally, bought by consumers. Therefore, meeting world food needs means devising national strategies that stress not only food production, but distribution and consumption.

### Global Food and Hunger Problems

The reports of the Presidential Commission on World Hunger and the Brandt Commission, along with the Global 2000 Report, all provide ample evidence of the continuing urgency of the hunger situation. According to these most recent studies, at least half a billion people—one out of eight in the world today—are malnourished. Over half of the malnourished—more than the entire U.S. population—are children under age 5.

The President's Commission found that chronic malnutrition, not famine



In India, private mills hire workers to process food.

or mass starvation, is at the root of the world hunger problem. Hunger is caused essentially by poverty, and in spite of some important gains, it is likely to get worse. Having identified hunger primarily as a problem of poverty, the Commission further concluded that "a nation's nutritional needs cannot be effectively addressed in isolation from broader social and economic programs that increase overall productivity and the incomes of the poor."

This means that even if production gains and postharvest systems were sufficient to eliminate the "food" problem, the "hunger" problem would remain for tens of millions. Who are these unfortunates? They include the landless and unemployed, people in areas where food production can only be minimal, and people with special nutritional needs—pregnant and nursing women, for example. That is why any successful anti-hunger strategy must combine production efforts with programs designed to raise the incomes of the rural poor. The key is more jobs.

It is an awesome challenge—and one in which the private sector may play a major role.

Since most developing countries depend heavily on agriculture, we have to look to agriculture for the jobs as well as the food.

However, if the farm sector is to flourish, it must be sustained by what economists like to call *effective demand*. To put it simply, before farmers will take the risks they believe are involved in raising production, they must feel confident that there will be buyers for their increased harvests. And in order to boost effective demand—to guarantee the buyers—literally millions of jobs will have to be created. Fortunately, this can be a self-reinforcing cycle: as farm yields increase, new jobs will open—to provide supporting goods, services and markets in rural areas. And finally, to complete the cycle, rising incomes among country folk should create a new demand for both agricultural and consumer products.

Training food technologists for all stages of this process is essential: to run the local industries which process, package, store and transport the increasing agricultural output.

### What is needed

In most poorer countries, agricultural development has little chance—mostly because government institutions and policies are not sufficiently developed. Often, in fact, pervasive institutional weakness—

including the lack of trained specialists—is a problem even more serious than is the lack of financial resources. Many donor projects fail, and a great deal of money is lost because of it. Paradoxically, international donors think largely in terms of capital needs and compete strongly with each other for access to the limited number of trained personnel within any given country. These well-meaning donors are actually making excessive demands while contributing little.

To take one case: Hundreds of millions of dollars have been loaned to Tanzania by the developed nations for a “crash” food production pro-



*Technology must be well-adapted to a farmer's needs—and ability.*



*Protecting fruit tree seedlings is important to this farming effort.*

gram—one that is now generally recognized as a nearly total failure. A recent evaluation concluded that “the single overwhelming cause of project failure has been deficient implementation capacity.” So it is that with the best of intentions, a government cannot efficiently use large amounts of money to expand food production without a corresponding depth of human and institutional resources.

Even if everyone had adequate purchasing power, there would still be bottlenecks causing problems for food production—lack of technical knowledge, inadequate irrigation, insufficient production inputs (fertilizer and seed, for example) and/or

credit.

The European experience in technological and economic development offers some insight. When Europeans colonized other parts of the world, they made the same mistakes that the Romans had made in northern Europe. Both attempted to transplant their own technology in agriculture, industry and education, without attempting to make them fit the new cultural and environmental conditions. Not surprisingly, many of their schemes failed. And perhaps just as predictably, the climate and the people of the colonies were blamed. Just as northern Europe was considered too cold to be inhabited in a civilized manner, it was argued that the trop-

ics were too hot and humid for long term economic development.

Similarly, the failure of many projects of technology transfer in the colonial and post-colonial period have given rise to charges that technology has failed. Yet when a set of tools designed to solve one problem is applied to another, different problem, it seems understandable that the tools may not always work. That does not mean the technology has failed—merely that it was used inappropriately.

In the developing nations around the world, more than half the people are involved in agriculture: 40-60% in Latin America; 60-80% in Asia; and 60-90% in Africa. The percentage of of women working in agriculture is more than 85% in many African and Asian countries. There can be little argument that with properly used and adapted technology, not only would productivity rise, but young people would have more time for training and education, and women, more time for other important tasks.

At the national or regional level there is a definite need for institutions and mechanisms that can make the introduction of new technology easier. Engineering colleges, vocational and management schools and various professional training institutions are all needed. Moreover, in



Fishing industries require boats; boats require builders.

almost every instance there is a clear need for responsive credit and financial institutions, and for communication and transportation services.

### The Role of Agribusiness

The rural economy in any developing country is made up of many interlocking systems. Farms, small businesses, commerce and services operate in an integrated fashion. Growth and development also take place in an integrated fashion. As a key component within this system, small and medium-sized businesses related to farming can perform a number of highly important functions.

Small-scale agribusiness can open markets, provide credit and technical links to small farmers. This will directly expand job opportunities for both farm and landless families in agricultural production and off-farm enterprises. This expansion will be sorely needed. The labor force in the countryside is expected to jump by 50% by the year 2000.

In terms of the technical potential of small agro-industries, there is much to be done in the area of post-harvest food losses. Of the agricultural commodities consumed as food, grains (cereals, legumes, oilseeds) contribute the bulk of the world's calories and protein. Before the har-



Small-scale farm-businesses can open many opportunities.

vest reaches the consumer, it must be dried, processed, transported and stored. At each of these points losses may be—and often are—incurred. The reduction and prevention of post-harvest grain losses, especially those caused by insects, micro-organisms, rodents and birds, is a cost effective way to increase available food particularly in those developing countries where the losses are largest and the need is greatest.

We still do not have statistically significant data on the full extent of postharvest food losses. For planning purpose, however, 10% is used as an average minimum loss for cereal grains and legumes; 20%, for

perishables. Using these figures and the most recent FAO production data for total developing country production, during 1979, approximately 63 million tons of cereal and legume crops were lost as food. Also during that year, 100 million tons of root, tuber, fruit, vegetable and nut crops were wasted. The loss of cereals and pulses in the developing world alone would have supplied the annual minimum caloric requirements (250 kg of cereal grains per year, per person) for 252 million people—more than the population of the United States.

The value of the lost cereals and pulses to the developing countries amounts to an estimated \$11 billion a year, based on a price of \$170 per metric ton of grain. It is harder to estimate the value of the perishable commodities lost, because prices fluctuate widely. However, the tonnage of lost perishable commodities exceeds that of lost grain and legume crops. These estimates are rough, but they represent losses which occur over and over again during the storage and processing of these commodities each year.

Conserving agricultural raw materials is only one dimension of the contribution a sound agribusiness sector could make. Suppliers for seeds, fertilizer, pesticides, implements, and food processing machinery who can service agriculture more efficiently, the processors who use farm products, and finally, the marketing sector constitute other key components. All can be improved.

In Jamaica, for instance, the amount of food that was formerly wasted between the farm gate and individual schools was cut by 40% just by applying management controls. This meant that the Jamaican government could feed more children a more nutritious meal (meeting one-third of their daily requirements), at lower cost. In addition, the advent of centralized purchasing power resulted in higher quality standards for the fresh fruits and vegetables supplied by local farmers.



*This Colombian farmer started his pig farm with a low-cost government loan.*

the lack of managerial ability can be serious.

Often a small entrepreneur's limitations are further aggravated, by his inability to obtain current technical information. This is especially true outside of the metropolitan areas. Consequently, decisions about technology, production processes and planning, inventory levels, and the like often are made using outdated and inefficient practices.

Lack of credit is still another constraint. Many firms are forced to rely on personal savings, money from friends or relatives, and moneylenders. They therefore find it difficult to obtain working capital or long-term credit on a timely basis and on reasonable terms.

In the area of raw materials and equipment, large-scale firms again enjoy several advantages. They can make bulk purchases, have procurement staffs, and more political, social, and financial influence with both the government and suppliers. These translate into price advantages and invaluable control in developing countries, where the supplies and sales networks are often inade-

### **Stumbling Blocks**

Despite the benefits of small agribusinesses, there are a number of constraints common to Third World countries which, when left unchecked, can nullify any benefits.

Government disincentives are one. They may take the form of factor-price distortions where artificially low interest rates and overvalued foreign exchange make buying mechanized equipment more attractive—when, in fact abundant, cheap labor and scarce capital should favor the development of labor-intensive operations. Other types of government disincentives include taxes and tariffs which favor large firms, giving them artificial advantages over small ones, or burdensome rules and regulations such as those requiring overly detailed reports, records and licensing. And



*Without jobs, people cannot buy food to feed their families.*

quately developed and where raw materials and equipment are usually in chronically short supply.

Managerial and technical advice in all critical areas—marketing, production, accounting, management, and finance—is usually offered through a variety of mechanisms. More often than not, the best mechanisms are private agribusiness and food technology companies.

### Where U.S. Business Fits In

A recent study on U.S. business and the transfer of agricultural technology documents the widespread need for U.S. business in the intermediate technology field. Thirty-two government and private parties in 10 developing countries taking part in the study said they had a definite interest in cooperating with U.S. firms in the manufacture of intermediate agricultural equipment in their countries. According to the researchers, aid organizations involved in providing development assistance also advocate more business activity in developing simple technological processes, in putting management skills to use, and in developing, financing, and evaluating appropri-

ate technology currently in use in various countries.

As for the U.S. firms themselves, the report says: "firms producing intermediate agricultural equipment such as hand-operated compressed air sprayers, feed trucks, garden cultivators and seeders, fertilizer spreaders, chisel plows, two-wheel tractors and attachments, grinder mixers and hammermills, prefer exporting, but indicate interest in alternatives such as consultancy, joint ventures and licensing."

In sum, U.S. agribusiness and food technology companies, both multinationals and small or medium industries, represent a major pool of untapped human and financial resources for overseas development. By entering into training and managerial contracts with U.S. agribusiness companies, AID and other donors could have a catalytic effect on agricultural development in the Third World—in large part by facilitating the flow of private capital to small-scale agriculture businesses overseas.

But if these projects are to have the desired effect, they will have to consider the question of jobs. There are two basic ways to insure that agribusiness projects generate a substantial number of them—first, by focusing on products that are highly labor-intensive. Second, all goods should be processed with techniques that use a higher number of workers. Examining labor-intensity of products should take into account both the growing and processing stages. Labor represents a high proportion of total costs in the processing of fruits and vegetables, at almost all levels of technology. So, U.S. food technologists trained to minimize labor—and therefore, costs—in food processing will need to be sensitive to the difference in developing country projects.

Despite the constraints that still prevail in many developing nations, and notwithstanding the adjustments that are inevitably required in standard operating procedures, U.S.

private investment abroad could be both possible and profitable.

### Making It Work

AID and other donors have had some experience in supporting projects to help small businesses. One example is the Latin American Agribusiness Development Corporation (LAAD). This company specializes in financing and developing agribusiness projects in Latin America and the Caribbean. Its shareholders include 14 U.S. companies as well as a number of banks. LAAD was designed to substantially augment the capabilities of a unique regional private effort to deal with Central American agribusiness as a whole, with emphasis on the promotion of non-traditional exports

In a 1977 evaluation, Checchi and Company reported that LAAD had been successful in encouraging the development of non-traditional exports. The Checchi report also stated that small farmers had benefited from assured markets for higher value crops and greater price stability when processing plants entered into contracts with them. The 110 projects LAAD has financed in 12 countries since 1970 have created thousands of new rural jobs and are generating over \$50 million in new exports every year.

AID also is supporting the Fund for Multinational Management Education in exploring ways in which multinational companies, governments, and intermediary organizations can cooperate in solving agricultural and rural development problems in developing countries. Intermediary organizations are those public and private, profit and non-profit institutions that mobilize corporate, government and/or international agency resources to undertake projects aimed at making rural areas economically viable. The project also will develop new networks of corporate executives, government officials, and intermediary organization personnel needed. Finally, the project will establish models for pri-



Most small farmers take produce to market.

vate and public cooperation.

The Industry Council for Development (ICD) is another intermediary which is promoting and assisting U.S. agribusiness firms meet development needs. The Commercial Seeds Industry Development project was established by ICD to help improve the effectiveness of seed enterprises in developing countries. With AID support, this project is pushing partnerships among seed businesses in all parts of the world. In October 1980, AID established another vehicle for assisting the Third World with its food problems. The Postharvest Institute for Perishables, called PIP, was established at the University of Idaho to provide expertise in reducing and preventing root, tuber, fruit, vegetable and spice losses. The PIP will send teams to developing countries to demonstrate improved processing, storage, and packaging techniques for perishables. It will provide training in the United States as well as in the developing countries themselves. And it will establish a voluntary network of donor organizations, trade associations and research centers interested in reducing losses.

In addition, the Postharvest Institute will conduct automated data searches and provide technical documents free of charge to interested parties in developing countries. It will develop commodity bibliographies and simple extension reports on ways to conserve perishables. The effort is especially important because it will focus on perishable commodities that can not only provide needed calories and nutrients, but can also be sold for export.

Currently AID is formulating an International Small Business Investment Companies project. This project, if approved, will create a mechanism for putting both U.S. and local capital and management skills to work to help small and medium-sized businesses. The concept is based on the U.S. Small Business Administration's small business investment companies that provide long-



*An Indian farmer fertilizes his field.*

term and equity financing, as well as technical assistance, to small businesses.

The strategy: to induce private firms in developing countries to invest in small businesses initially outside of large metropolitan areas. As in the United States, the major incentive will be the availability of sufficient long-term funding to allow an internal debt/equity ratio of up to 3:1. Leverage funds will be made available by AID through either direct loans, guarantees of private sector loans, or co-financing schemes. Once a mechanism is functioning, the private investors will have substantial financial interest in ensuring that it and its portfolio companies are viable.

AID is also planning a Center for Intermediary Services (CIS). The proposed center will facilitate the transfer of technology and managerial expertise from the U.S. private sector to small and medium-sized agro-industries in the Third World, largely through developing and financing management and technical support contracts. The center will be a clearinghouse of information for U.S. small businesses interested in developing country business opportunities. It will be organized as a private, non-profit entity. This will allow it to charge for services, attract private sector funding, establish operating procedures that require minimal paperwork and have

the flexibility needed to establish good working relationships with the private sector.

Many other U.S. organizations already have devised ways to become involved in Third World development. For example, the Institute of Food Technologists has an existing network which allows its members to directly participate in development assistance. The League for International Food Education, L.I.F.E., is a consortium of eight professional societies including the Institute. The American Institute of Chemical Engineers, The American Assoc. of Cereal Chemists, the American Society of Agronomy, the American Chemical Society, the American Institute of Nutrition, the American Society of Agricultural Engineers, and the American Oil Chemists Society also are consortium members of L.I.F.E. The League has recently undertaken a study to identify ways of mobilizing local resources for solving malnutrition problems in Latin America.

To sum up, there is a role—a growing one—for U.S. food technology in a hungry world. This country has unique technical and managerial capabilities which can serve this world. And developing countries represent huge new markets for American goods and services. They also represent a source of specialized materials and food supplies. The increasing ability to communicate freely worldwide is encouraging the developing world to seek the industrial expertise known to exist elsewhere. No society, including our own, is prepared to remain at a given stage of industrial and economic development indefinitely. U.S. industry possesses the expertise to help developing countries derive far more from their own resources. That expertise is the scarcest and most essential tool in the development process. □

**William L. Rodgers is chief of the agribusiness section in AID's Office of Agriculture.**

by Kobina Danson



# NIGERIA FISHES FOR SELF-SUFFICIENCY

A new crash program to boost fish production is taking shape.

**T**he traditional Nigerian fishermen of a few years back cast their nets from dugout canoes, and even paddled out to brave the rollers of the Atlantic Ocean. Fishing was more an art than a science, and its scope was limited to supplying the fish required by the fishermen, their families, and their neighbours.

But under a government-sponsored crash program to increase the country's fish production, fishing is taking on a new look. Thanks to advanced science and technology many fishermen are becoming fish farmers in Nigeria.

Spearheading the program are the Federal Institute of Oceanography and Marine Research, and the Research Institutes of Kanji Dam and Lake Chad. Their combined research efforts recently paid off when they successfully induced a local freshwater fish called *abori* (scientifically known as *Clarias Lazea*) to breed artificially.

The technique involves injecting the fish with a hormone extract from fish belonging to the same species. Five thousand tiny fish fry were produced as a result of the experiment, which gave a boost to the Federal Ministry of Agriculture's fish seed multiplication program.

The program eventually will establish fish seed multiplication centers in all 19 states. Two such centers—at Tiga in Kano State and Maska in Kaduna State—are already operating. Once a reliable supply of fish seed is available more Nigerians will be lured into fish farming. This should do much to increase the supply of fish for domestic consumption.



But fish farming alone cannot meet the nation's needs, so as part of the accelerated fish production program the Ministry is also helping to modernize the fishing industry. Large numbers of modern canoes, equipped with outboard motors and nylon nets, are being distributed through the state governments, and the fishermen are being taught how to use and maintain them. Landing bases, stores, and fuel depots are also being established.

Lack of processing and storage facilities had posed a major problem for the fishing industry in the past. But no more. Improved smoking kilns are under construction at strategic fishing locations for local processing. The government also has embarked on a program to build 123 cold stores throughout the country. These will be serviced by a fleet of refrigerated vans.

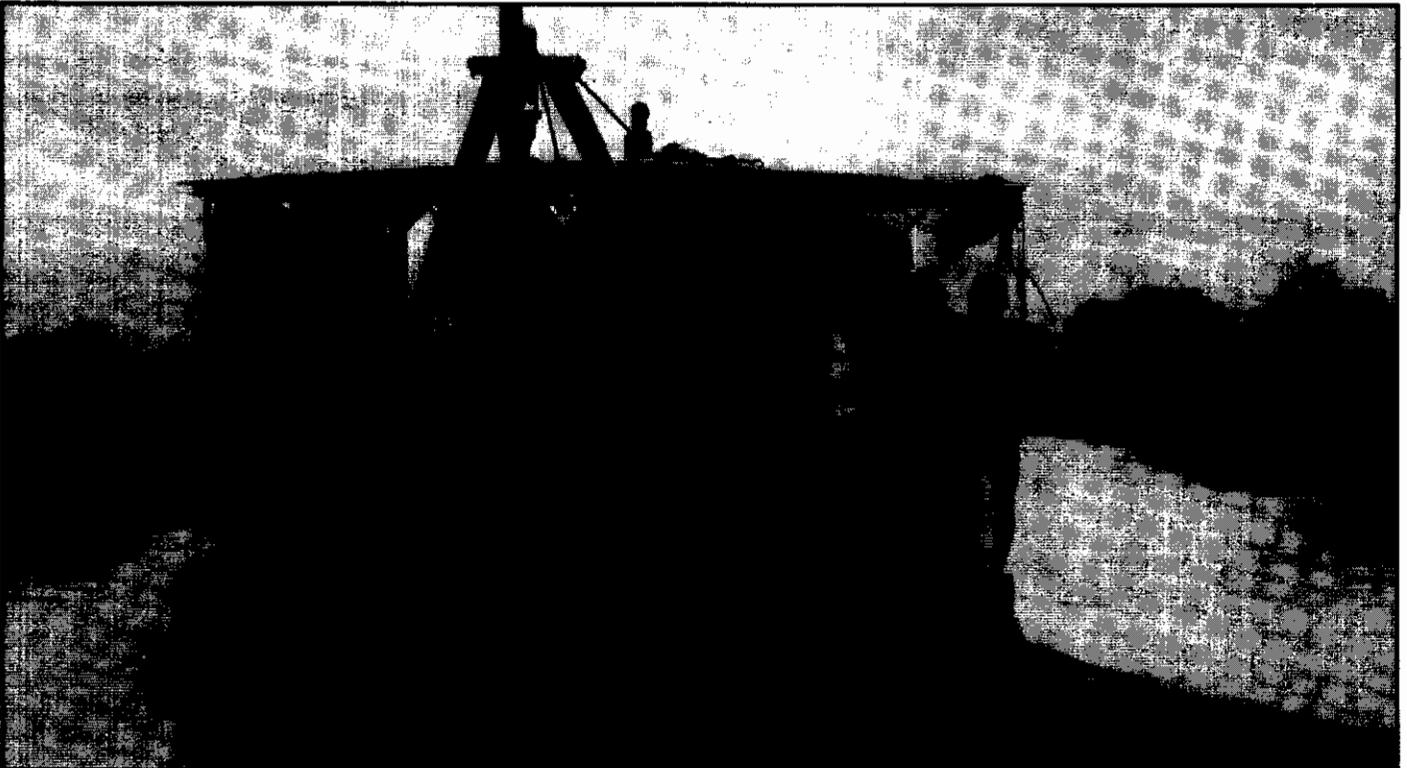
The reason for the crash program is that Nigeria faces a serious shortage of fish. Consumption has shot up in recent years, and several hundred thousand tons have had to be imported to keep up with demand. Fish now accounts for about one-third of the nation's animal protein consumption.

The phenomenal rise in fish consumption is the end result of sharp increases in the price of beef and poultry since the Sahelian drought of the 70s. The drought killed many livestock in northern Nigeria, the region that supplies the bulk of the country's animal protein.

Nigeria has about 496 miles of coastline, many rivers, lakes and lagoons, and also plans to utilize the vast freshwater reservoirs and canal systems created by irrigation dams. At present the main impact of the accelerated fish production program is being felt in nine of the 19 states. As the program spreads, the people behind it have no doubts that the combination of fish farming and modernized capture fisheries will make Nigeria self-sufficient in fish in the near future. □

**Kobina Danson is with the International Development Research Center of Canada.**

*By dredging this waterway these Nigerian fishermen will soon have access to the ocean.*





# USE NO HOOKS

**W**ho would dream that small holes in fertilizer bags could cost as much as \$5 million a year and make a difference whether a lot of people went to bed hungry or adequately fed?

The problem is real.

In Bangladesh, for example, fertilizer makes up a sizable portion of commodities shipped into the country—1 million tons a year from several international donors at the going rate of \$255 per ton. U.S.-financed fertilizer shipments in recent years have ranged from 60,000 to 100,000 tons.

For as long as anyone can remember, stevedores in Bangladesh—and all over the world—have used hand hooks to unload ships. The problem with using them on fertilizer bags is that the hooks puncture the heavy-duty sacks. The hole usually closes up; undetected is the large hole in the inner plastic bag. By the time a bag leaves a ship, it is rolled, tumbled, jerked and otherwise moved innumerable times. As it continues on

## A new policy that may save millions.

by Alexanderina Shuler

its long, rough journey from dock to rice paddy or wheat field, several pounds of fertilizer pellets, which have moved into the wall between the outer and inner bags, have dozens of chances to escape as the bags suffer tears, snags and stretched seams.

Also, moisture is absorbed, impairing the effectiveness—the chemical properties are adversely affected and the fertilizer clumps, which means it tends to spread unevenly when the farmer puts it on his field.

Whenever possible, spilled fertilizer is swept up and rebagged. Often, the spill goes undetected; only by

getting down on one's knees can sprinklings be seen.

The "invisible" trickling of fertilizer could be seen as food that will never be grown. Exactly how much is lost? Weighing the bags when they arrive at port and then again at final destination would prove misleading. Lost fertilizer weight is replaced by the weight of moisture picked up along the way.

According to some estimates, if the fertilizer is not lost nor its effectiveness reduced—which happens to at least 2% of the total used in Bangladesh each year—40,000 tons or more of grain could be grown. Each year, as fertilizer shipments go up, so does the loss. Forty thousand tons of grain are enough to feed 200,000 people for a year. People are not starving because of the fertilizer problem, but it does mean the government has to import that much more food.

Two years ago marked the beginning of the end of the hook-in-bag problem. "We just couldn't ignore

the situation anymore," AID's Paul Maddy says. The clue to solving the problem was in getting the dock workers to put aside their hooks. Maddy, an agronomist and now logistics officer in Bangladesh, and his staff traveled about the country and to the ports, spreading an awareness of the magnitude of the preventable losses. One local member of the staff, Robert Gonsalves, "was especially valuable to our work," Maddy notes. "Bob knows people everywhere and is respected. That was critical to our getting our message across and having people accept the changes we proposed."

Full of energy and enthusiasm, Gonsalves commanded the attention of laborers and government officials when he approached them with, "Hooks are snatching food from the mouths of our children. Hooks can't produce more rice but fertilizer can."

"Workers need to understand what happens and why, if a problem is to be corrected," Maddy says, elaborating on the staff's effort.

"It's a matter of education. Order someone, 'don't use hooks!' and you may get some results, but they'll be temporary. As soon as the officials are out of sight the hooks will start swinging."

As they went about their work, Maddy says the staff became aware



of several misconceptions people held. First, there was the idea that workers don't care and would not cooperate. Get tough instead! Furthermore, some people insisted hooks are necessary to provide rapid unloading. One suggestion frequently heard was a special bag, perhaps with handles at both ends.

In response to the AID mission, the union chief at Chittagong port said, "we like to express our heartfelt thanks to you and AID for your concern to the losses being sustained by the people of Bangladesh due to damage to the fertilizer. We are in agreement with any proposal that will help better operations in Chittagong port as well as safeguard the interest of the dock workers." He closed by offering full cooperation.

Once the workers were shown they could work without hooks and not get sores—which turned out to be a real concern among workers—they were cooperative. Labor agreed to rewrite contracts that would specify "no hooks" under any circumstances.

More hands are now needed to move the bags—three people now lift with both hands held flat under the bag—and this is an added expense. But the cost is far less than the loss, and less than the cost of devising a new bag.

In addition, Maddy says the rate of unloading actually has increased with more men working to load bags into larger nets or platform slings. Another misconception disproved.

The idea is not a flash in the pan. The Bangladesh government—aiming to meeting its goal of food self-sufficiency by 1984—is institutionalizing the changes. The fact that government, labor and contractors are discussing and negotiating the problem, not only at the docks but throughout the country as the bags of fertilizer proceed in the distribution chain, is good news. As Maddy notes, the problem can be solved, as crews in Chana and Chittagong, where vessels have discharged cargoes without using hooks, have shown. □

Alexanderina Shuler is editor of "Front Lines," AID's employee newspaper.



IN PRINT

# Food for War—Food for Peace

United States Food Aid in a Global Context

by Mitchell B. Wallerstein

**M**r. Wallerstein has produced a comprehensive, useful survey of the evolution of bilateral and multilateral food aid through 1976. However, while the first part of the title—"Food for War"—is provocative: the discussion of this phase of the PL 480 program is comprised largely of clichés rather than critical analysis.

The organization of the book—the first and third sections deal with the evolution and foreign policy objectives of the U.S. food aid program, while the second and final parts are concerned with international food aid—is somewhat confusing and leads to repetition.

The availability of food for aid purposes stemmed from the U.S. farm legislation of the early 30's. During World War II and immediately thereafter, the United States supplied massive amounts of food aid through Lend Lease, the U.N. Relief and Rehabilitation Administration, other specialized legislation, and the Marshall Plan. Pressure to "dispose" of mounting surplus stocks resulting from high price supports and technological advances led to the enactment in 1954 of the Agricultural Trade Development and Assistance Act—PL 480. Its original intent was primarily to help U.S. farmers; benefits to recipients were of secondary importance. But the author misses another important aspect of the PL 480 program. The boost to U.S. shipping resulting from the requirement that at least half of the PL 480 cargo (as with all aid-financed cargo) be shipped on U.S. flag vessels is not mentioned.

It was not until the Kennedy-John-

A review by  
Kathleen Bitterman



son years that the orientation of the program shifted more toward using food to promote economic development in the Third World, albeit with an eye toward developing future cash markets. The 1966 revision of the PL 480 legislation provided *inter alia* that food could be produced for aid purposes. Wallerstein misses (or ignores) the point that at the time of

**Food for War—Food for Peace: United States Food Aid in a Global Context, Mitchel B. Wallerstein, MIT Press, Cambridge, London, 1980. 312 pages. \$30.**

export, the secretary of agriculture must determine that PL 480 shipments will not reduce amounts needed for domestic consumption, commercial exports and adequate carryover stocks. (There is now some leeway to use supplies for urgent humanitarian purposes.)

Wallerstein is extremely critical of the Nixon administration's decision to use a large share of PL 480, particularly in 1974, for Indochina—"Food for War!" However unpopular, the United States was heavily engaged in the war; to deprive the Vietnamese and Cambodians of food that they could no longer produce themselves would have caused even greater suffering, and complicated military operations. An important point: total tonnage made available for PL 480 in 1974 fell by more than 50% from the preceding year. To a large extent, this reflected the legislative limitation mentioned earlier. For example, data cited by Wallerstein indicate that by the end of 1973, carryover stocks of wheat—the mainstay of PL 480—had fallen by more than 40% from 1972. In theory, commercial exports might have been curtailed (this would have caused an uproar); in fact, there was little alternative under the law to reducing food aid. Opponents of the war were enraged by the size of the Indochina allocations. Congress subsequently took a side-swipe at PL 480 by prohibiting shipments to Vietnam, limiting concessional sales of food to higher-income countries, and establishing minimum allocations for the donation program.

Since the early days of PL 480, the

United States has used food aid, either by itself or in combination with other resources, to further U.S. foreign policy objectives, including national security interests. Several examples are cited, ranging from aid to Yugoslavia during the height of the Cold War; to Egypt, both during the Nasser regime and later in the course of shuttle diplomacy; to India—huge grain shipments that saved that country from famine in the mid-60s. Led by President Johnson, the United States exerted considerable pressure on the Indian government to focus on expanding its own agricultural production including increasing production and imports of fertilizer. Wallerstein's account of the suspension of U.S. grain shipments to Bangladesh until jute that Bangladesh had sold to Cuba was finally shipped, is essentially correct. There is an implication, however, that U.S. officials could have chosen otherwise; the fact that they were bound by the law does not come through.

Wallerstein is ambivalent on using food aid as an instrument of foreign policy. He argues that the availability of food aid resources has played a pivotal role in attaining specific policy objectives that could not have been accomplished otherwise. But like so many others, he apparently is influenced by the mystique of food aid—somehow or other it should be divorced from political concerns so long as widespread hunger exists. It should be remembered that the United States has, in fact, responded promptly to disaster needs—in the Sahel, Nigeria, Bangladesh during its struggle with Pakistan, in post-war Cambodia, and in many other areas of the world. But food aid is a finite resource; even if it were targeted only to the most serious hunger problems, it could make little impact.

The concept of multilateral food aid began in 1943 with the establishment of the Food and Agriculture Organization (in fact, only indirectly concerned with food aid per se) and

the U.N. Relief and Rehabilitation Administration (UNRRA). The United States was a major contributor to UNRRA; for various reasons, that ended in 1947. It was not until 1960 that this country, motivated in part by the desire for burden-sharing, made a proposal in the U.N. General Assembly that ultimately led to the establishment of the World Food Program (WFP). It began in 1962 as a three-year experiment (since continued) with a goal of \$100 million. The U.S. supplied over half of that amount. Pledges, expressed in dollars, totaled \$674 million by 1975-76.

As Wallerstein explains, except for a relatively small amount of disaster aid, WFP's operations are project-oriented (that is, direct distribution of food through school feeding, mother-child nutrition schemes and food-for-work). According to the rules, food is turned over to recipient governments which must manage the projects and finance the substantial related internal costs—transportation, distribution, for example. WFP's operations and problems are examined at somewhat excessive length.

During the Kennedy Round of the General Agreement on Tariffs and Trade, the United States demanded wider food aid burden-sharing as a price of its participation in the Wheat Trade Convention and concessions on industrial products. European countries, including the European Economic Community and Japan, reluctantly agreed; the result was the Food Aid Convention (FAC) of 1967. This provided for a relatively modest amount of cereals (or the agreed cash equivalent) of 4.3 million tons annually of which the United States committed 1.9 million tons. In 1980 the FAC commitment was finally increased to 7.6 million tons—still well short of the 10-million tons recommended by the 1974 World Food Conference. The U.S. pledge is now 4.5 million tons.

The summaries of other countries' bilateral and multilateral food aid programs are well done. Except for

Japan, other nations provide food aid on a grant basis; some countries tend to concentrate bilateral aid—France to its former colonies; Australia to nearby countries; and Canada to Asia. The food aid program of the nine-member European Economic Community is both bilateral and multilateral.

The pros and cons of multilateral and bilateral food aid are discussed at some length. Wallerstein concludes that donors will continue to give at least lukewarm support to WFP but it is extremely unlikely that they will forego the foreign policy benefits of bilateral aid. He does not foresee any major restructuring or expansion of the World Food Program—his thesis is borne out by the fact that for 1981-82, WFP fell short of achieving its \$1 billion target. The expectation that donors are more likely to increase their commitments through the Food Aid Convention, which may be fulfilled by extending bilateral food aid, is also on the mark. As noted above, in 1980 FAC commitments increased substantially.

In considering the goal of world food security Wallerstein concludes that more harm than good would come from trying to force changes in donor food policy. He believes that "mutually coordinated bilateralism" as exemplified by the FAC will facilitate provision of food aid on a more regular, longer-term basis. He asserts, but does not explain, that greater reliance on FAC coordination (which in fact is more of a statistical exercise than otherwise) will prevent conscious mislabeling of food aid—presumably, reducing the amount provided for political purposes. Short term, ad hoc responses to food deficits will not suffice—to achieve real progress, donors must realize the interconnectedness of their food aid and other aspects of their foreign policies. □

**Kathleen Bittermann, now retired, formerly was the director of AID's Food for Peace program.**

The three latest French foreign policy initiatives confirm that France will be more sympathetically involved in the Third World under socialist President Mitterand than it was under his predecessor. This, in turn, increases the potential for strain or irritation in French-American relations. The three initiatives involve El Salvador, southern Africa and the Middle East.

—Christian Science Monitor

Pinched for money and struggling to develop a vastly unmodernized country, Ethiopia's radical military government has begun making overtures to the West in a search for economic aid.

Though Ethiopia is the Soviet Union's most strategically placed African ally, the Russians so far have furnished the country with little other than massive amounts of military aid.

—Baltimore Sun

A lifeline of ships streamed out of United States ports last year with more than half of the grain in international trade, carrying wheat to the Soviet Union and China, animal feed to South Korea and corn to Mexico.

More than ever before, the world depends upon American exports for its basic food needs. This country now exports more grain than Latin America and sub-Saharan Africa together produce.

In the last 10 years, American farm exports have almost tripled in volume, surging 25% in the last two years alone.

—Ann Crittenden  
New York Times

# WHAT THE MEDIA SAY...

A hungry man is an angry man. The late Bob Marley sang those words with a reggae beat to hundreds of thousands in tiny, poor Caribbean countries. The words carry a note of truth. In search for answers to poverty, one is apt to try anything that seems promising: communism, socialism, democracy. Whatever.

United States intentions of fostering stability and democracy in the Caribbean should take cognizance of this tenet.

—Miami Herald

Over the weekend the Reagan administration shifted U.S. policy with respect to southern Africa into neutral. In a lengthy statement, reportedly approved at the highest levels of the government, Chester A. Crocker, assistant secretary of state for African affairs, said the administration will not take sides in disputes between South Africa and black African nations so that it can be in a better position to negotiate between the parties and protect U.S. economic interests in sub-Saharan Africa.

The new African policy, as laid out by Mr. Crocker, was balanced, elaborately reasoned and terribly short-sighted.

—Philadelphia Inquirer

Consider Zaire, a country the size of the United States east of the Mississippi.

It has 26 million people. Three-quarters of them subsist on an annual income of less than \$100. Two-thirds of them are illiterate. Its President, Mobutu Sese Seko, who has ruled the country for 16 years, is a millionaire many times over.

Yet, Zaire is loved by the West.

The reason: raw materials. Zaire is rich in them. It has, for example, the world's largest known reserves of cobalt (about 30% of the world's total): as well as huge quantities of other resources essential to industry and defense, including zinc, manganese and copper. Zaire is also the world's largest producer of industrial diamonds.

—Christian Science Monitor

In response to the government of Egypt's policy to expand the role of the private sector in Egypt's economic development, the United States' position has been to fund specific programs to assist Egypt in (its) efforts.

The Egyptian economy is very much an economy in transition. The resulting changes in the economy are part of a broader political evolution away from a posture combining intense inward nationalism and considerable interdependence with the Soviet Bloc toward that of a more international outlook and a deliberate move toward closer political and economic relationships with the Western nations.

—David Detloff  
Fond du Lac (WI) Reporter

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