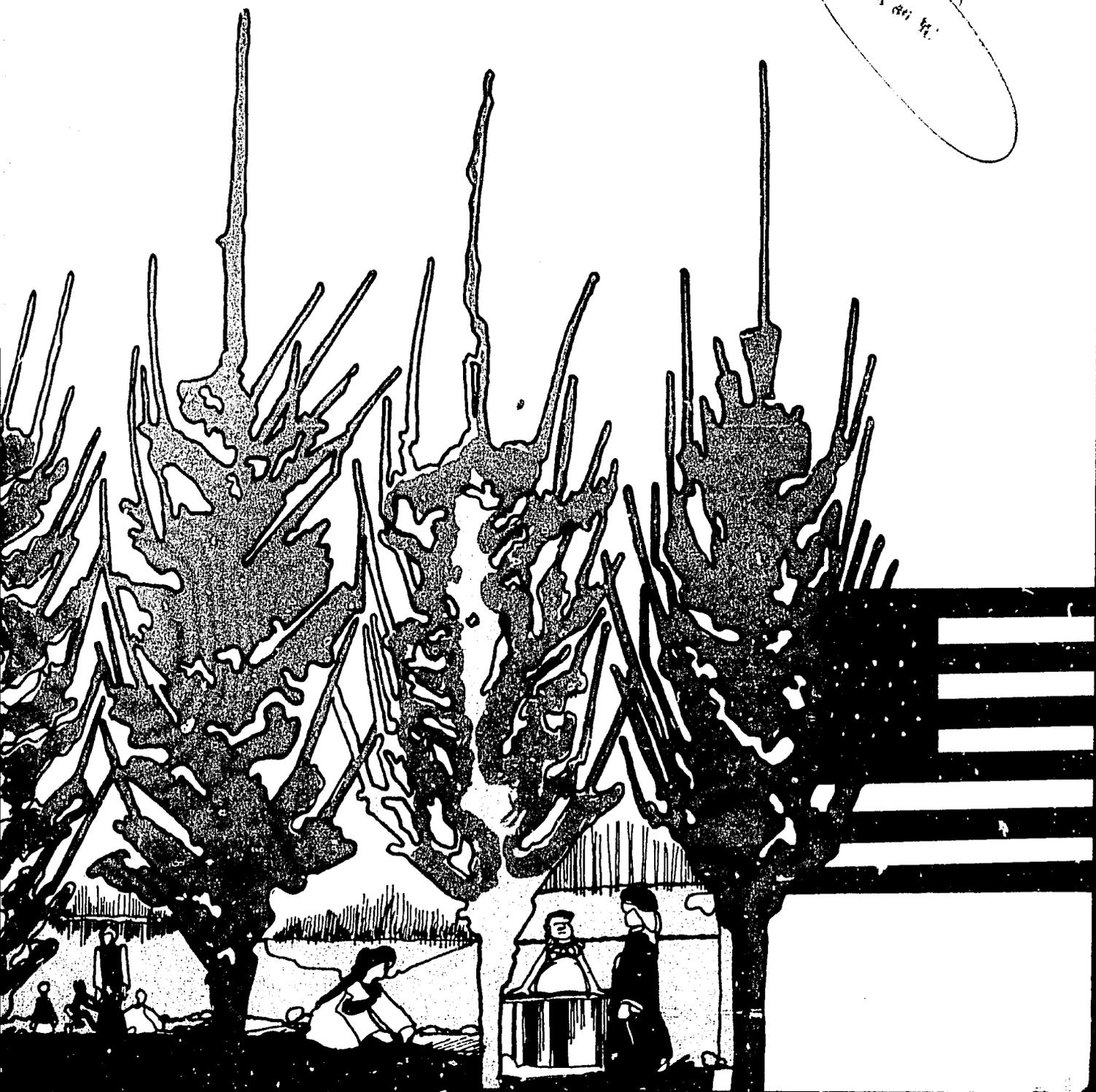
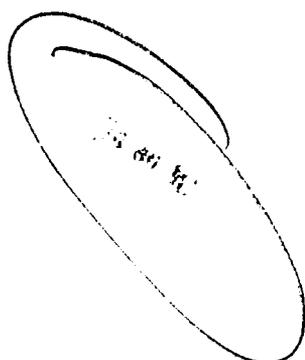


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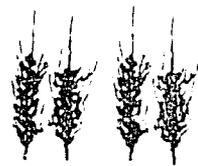
The United States and World Agricultural Development



**The United States
and World
Agricultural Development**







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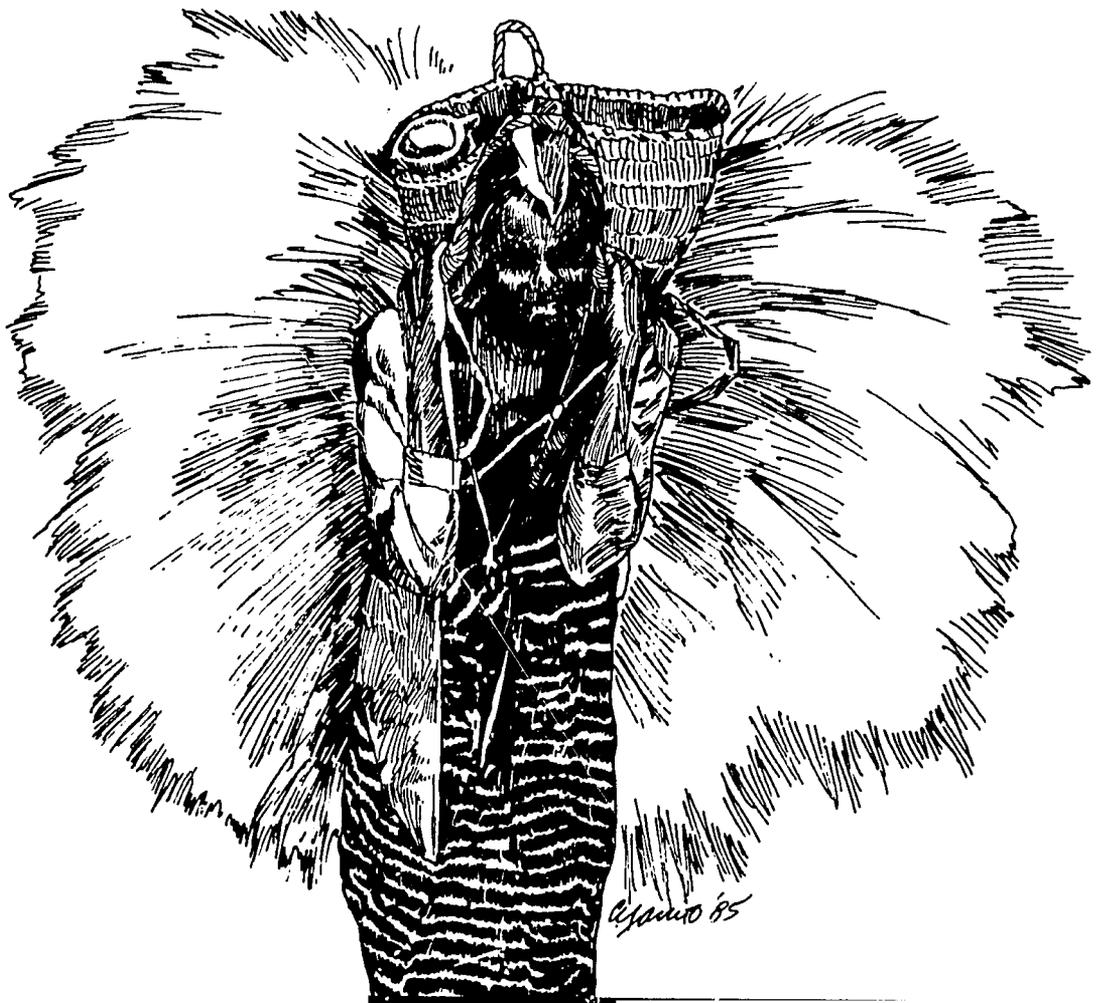
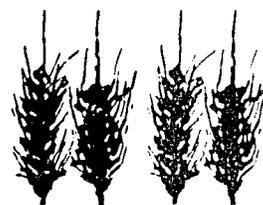


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FOREWORD

The United States is a member of an increasingly interdependent world community. Technological advances in communications, transportation, education, economics, and military capability have significantly increased the impact of world economic, social, and political developments on life in this country.

As a large, highly developed country, the United States has provided leadership and assistance in addressing worldwide problems and opportunities—including agricultural and other development assistance to less developed countries. Many of our citizens, however, do not understand the extent and nature of hunger and poverty, the contributions the United States has made to agricultural development, and the implications of this involvement for U.S. security and economic well-being.

The Consortium for International Cooperation in Higher Education (CICHE)* and the Extension Service, USDA, are collaborating with the Cooperative Extension Services of Georgia, Michigan, Rhode Island, and Utah to gather existing research-based information and develop educational materials and pilot programs that will assist county and state extension personnel nationwide in integrating international programming into their current activities.

The CICHE/CES project, entitled "Understanding World Agriculture," is supported in part by a grant from the United States Agency for International Development (USAID) under a program mandated by the Biden-Pell Amendment to the International Security and Development Act of 1980. Through this amendment, the Congress authorized the agency to facilitate widespread public discussion, analysis, and review of the issues raised by the 1980 Report of the Presidential Commission on World Hunger. Substantial support in the form of staff time and other items of expense has also been contributed by CICHE, ES, USDA, and the Cooperative Extension Services of the four participating states.

This handbook for extension personnel is one product of the CICHE/CES project and includes material that addresses:

- Relevant research on the issues of hunger and poverty.
- Strategies for economic development.
- A history of U.S. involvement in development assistance.
- Implications for U.S. security and economic well-being.
- Guidelines for calculating the impact of development and trade on a state or local economy.
- Case studies of current development education programs and sources of additional information.

I hope this handbook is useful to you in integrating international perspectives into your current program efforts.



June 1985

Mary Nell Greenwood
Administrator, Extension Service
U.S. Department of Agriculture

*CICHE is a private, nonprofit corporation composed of five major higher education associations. One of its members, the National Association of State Universities and Land-Grant Colleges (NASULGC), provides technical coordination for the project in consultation with a national advisory committee.

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APPRECIATION

This handbook, "The United States and World Agricultural Development," became a reality because of the dedicated service and cooperation of many people. The authors have been cooperative in adjusting their manuscripts to fit the purposes, scope and space of the handbook.

Eileen A. Fesco, a graduate student in Political Science, Utah State University, provided a pleasant, willing attitude and professional skill in researching essential reference materials in AID and USDA offices, Washington, D.C., and at various other locations. John Wallin, Bobbie Libby and Linda Sarlo were most helpful with typing and word-processing skills. The editing by Ron Daines and graphic work of Richard C. Clawson and associates made this publication possible. Finally, we acknowledge valuable cooperation, encouragement and financial support from many sources within USDA, USAID, and colleagues of Land-Grant Universities.

The Publication Committee

PREFACE

Hunger, starvation, and malnutrition are as old as man himself. Their harmful influences on the development of individuals and nations have been replayed time and again throughout history as natural and man-made disturbances have caused imbalances between food availability and population numbers in many regions of the world.

Some imbalances have been extreme, causing major disasters affecting large segments of the population. Events in Ethiopia during the 1980s provide a current reference, but history is replete with such calamities. The Irish famine in 1846 and the Bengal famine in India during the 1940s are just two memorable examples.

But most hunger has been and is now much less apparent. Privation and inadequate nutrition plague much of the world's population daily, bringing in their wake incidious and often unseen impacts, which limit both physical and mental development. Perhaps at no other time has the need to do something about this problem been so clear and the urgency so critical as now. Likewise, at no time has the resolve and willingness of nations been so apparent.

In earlier times, hunger went unchecked and solutions were left mostly to nature as no concept of a global responsibility existed. It was the recurrence of such food-related disasters that led Malthus to his now-famous, dismal prediction of a world future in which population would greatly outrun food supplies and create unimaginable suffering.

In more recent times, regions suffering hunger and starvation fell under the jurisdiction of colonial powers who controlled vast areas of Asia, Africa, and Latin America. National development lagged during this era and while the colonial powers may have agonized over famines and the problems of the poor they generally lacked a response capability to alleviate widespread hunger.

The process of one nation helping another and the concept of a global responsibility are fairly recent phenomena that have evolved with the development of a highly interrelated global food system. Today, nations are linked by sophisticated communications, international financial and commodity markets, efficient and low-cost international transport systems, and agricultural production systems, which in many nations feature highly skilled scientific institutions. The development of this global system, rather than resolving the issues of the world's food supply, has made them more visible and created a greater realization of our international interdependence. No longer can or will one nation ignore another nation faced

with starvation and suffering. Fortunately, many developed nations today (some of them former colonial powers) have both the capability and the willingness to respond to the needs of developing nations.

In addition to the influence of an interdependent global food system, two happenings in the years right after World War II helped set the stage for today's commitment by richer nations to assist their poorer neighbors.

First, beginning in about 1947, the world saw a big reduction in colonial rule as a partitioning of regions in Asia and Africa responded to a rising spirit of nationalism. Independent nations replaced colonies, joining a long list of other nations in Central and South America to form an extensive group of less developed countries (LDCs) in need of economic assistance.

Second, at about the same time, the United States was seeing the enormous developmental response of its Marshall Plan assistance to Germany in the aftermath of World War II. The recovery in Europe (and Japan) was encouraging and hopes ran high that such assistance could be repeated in developing nations. In his 1949 inaugural address, President Truman committed the United States to this endeavor in what has come to be known as the Point 4 Program. With this pronouncement, the United States embarked on a worldwide effort, since joined by other developed nations, to rid the planet of starvation and suffering.

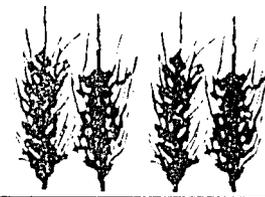
This program, now in progress for some 35 years, has been both praised and criticized. Some see it as an ethical issue involving basic humanitarian obligations that contribute to the welfare of the poor and to international stability. To others, it appears as a wasteful and ineffective use of U.S. resources that could be better used at home. But to most Americans, it is a misunderstood program. In part, this lack of understanding reflects a basic absence of knowledge.

The purpose of this manual is to fill the information gap by providing a perspective on world food issues and a discussion of why and how the U.S. participates. Our intent is to lay a foundation for better understanding of the issues with the hope that this will lead to a more enlightened and concerned public.

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Part I—An Overview: Interdependence and Development

Chapter 1



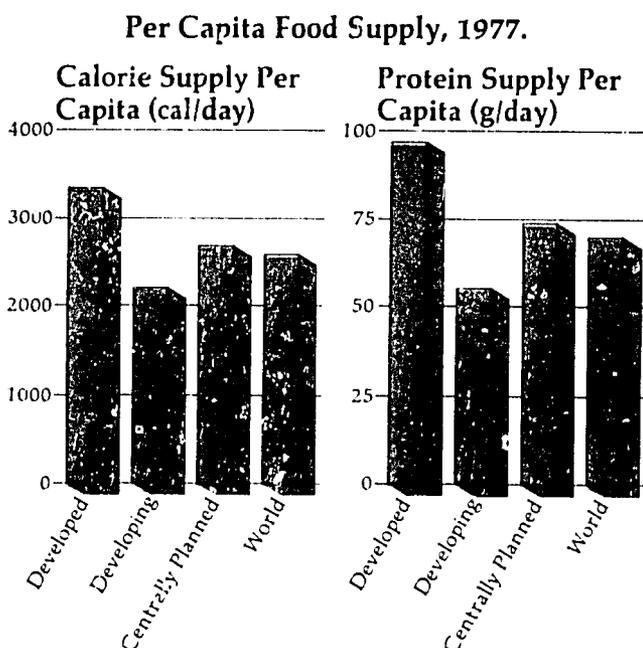
THE WORLD FOOD PROBLEM

by E. Boyd Wennergren

The world food problem is defined most often as a shortage of food which threatens the welfare of large segments of the world's population. Starvation, hunger, and malnutrition are common manifestations of the imbalance between the supply of food and the number of people. The World Food Organization estimates that as many as 500 million people suffer from hunger and the effects of starvation. The World Bank says that probably 800 million people in the developing world live in absolute poverty. For the most part, these conditions are chronic and are routinely imposed on these people as a daily way of life.

One demonstration of the problem can be seen from the differences in per capita supply of food for people in various regions of the world (Figure 1.1). For example, per capita caloric supply in developing nations as a whole falls below the world average by about 17 percent. However, only nations in Africa, Asia, and Latin America are below the world average. It is primarily in these three regions where food shortages generally exist. All nations (including rich ones) have poor segments in their populations, but these are not generally identified as trouble spots when discussing the issues of the world food problem. The same general picture of food inadequacy also evolves where protein from vegetable and animal sources is considered.

Figure 1.1



Source: Reproduced from William P. Park, "World Food Supply: Problems and Prospects," Staff Paper 84-01, Agriculture Experiment Station, University of Tennessee, September, 1984.

It should be noted that the average availability of food worldwide is not accepted as a standard for minimum daily nutritional requirements. The issue of nutritional standards is widely debated and subject to constant review and revision. Minimum standards vary for different nations based on culture, weather, size of the people, work patterns, and various other determinants of nutritional need. Still, the impression left by the data in Figure 1.1 is the one most generally accepted. Food shortages do exist and they are most critical in the developing nations of Africa, Asia, and, less so, Latin America.

Contrary to popular belief, the full dimensions of the world food problem are not expressed just by food shortages. Hunger exists, starvation is present, and people are malnourished. But these are only symptoms of more basic problems. People are hungry and malnourished mostly because they are poor. Poverty is a major source of the world food crisis. It has two impacts on those in LDCs. On the demand side, it limits the capability of people to purchase in the marketplace. Poor people lack money to buy food. On the supply side, poverty precludes savings and thus investment in new technology, which severely limits food production. Farmers producing at or below a subsistence level have little left over to save or to purchase new inputs. The food problem is both too little individual demand and too little supply. In the aggregate, poverty combines with food insecurity, population growth, poor income distribution, and inequitable social, political, and economic systems to form a truly complex issue. But at the apex is the inability of people to purchase or produce adequate amounts of food for their families.

For simplicity, the food problem is commonly thought of as the gap between current and future demand for food and the capacity of the world to meet this rise in need. Reducing the issues to this simplistic level enables one to identify the components that determine the supply and demand for food, other complex forces related to food issues, and the potentials that exist to someday better feed the world.

Demand For Food

The demand for food is an economic concept that recognizes people have many different needs that must be satisfied by limited purchasing power. For individuals, the demand for food depends on both their ability and willingness to pay for the food. This becomes complicated, however, because an increase in income does not necessarily mean an equal increase in

the demand for food. People may also buy nonfood items with part of the new income. This tendency is higher for people with larger incomes than for those with lower incomes. For poor families, most increases are spent for food until some income threshold is realized.

In addition, tastes and preferences for food types, which arise from nutritional need and are conditioned by cultural and social tradition, help determine individual demand. For example, people in Asia show a strong preference for rice, while people in some regions of Africa show an equally strong preference for corn.

For a nation, the total demand for food is determined by the sum of individual demands. Therefore, as population rises the amount of food demanded increases in direct proportion. Each percentage rise in population adds to the total demand for food. Thus, the aggregate food demand is a function of population and per capita income, plus the influence of tastes and preferences. These determinants must be clearly understood if attempts to influence the demand for food are to be effective.

As suggested earlier, the aggregate world food problem is more a problem of poverty than a shortage of food. Too many people in the developing world either lack the land, tools, knowledge, or resources to grow enough food for themselves, or they are without money to buy from others. Population growth merely means more food is required, and unless food production grows faster than population and unless there is income to buy that food, the welfare of people will not be improved.

Population Trends And Impacts

Population levels and growth generate the basic pressures that make the world food problem the urgent issue it is. Since 1950, the world has experienced a population explosion of unparalleled comparison (Figure 1.2). Population grew from 2.5 billion in 1950 to 4.5 billion in 1980, or an overall annual rate of about 2 percent. During these 30 years, almost 2 billion people were added to the population, a total only slightly less than the population existing in 1950. On average, more than 65 million people were added each year. Slightly on the brighter side, population growth from 1970 to 1980 was reduced to 1.8 percent annually. But even at that level, the world's 4.5 billion population will double in about 40 years. By comparison it took the world several million years to reach its present population.

Such a rapid expansion in population has had a dramatic impact on the total demand for food. The nature of its impact can be better understood by looking at where population growth occurred and how growth patterns in different nations and regions changed during the period (Table 1.1). Several noteworthy points are demonstrated by these data:

(1) Of the 15 most populated nations in the world

Figure 1.2a

World Population and Growth, 1950-80.

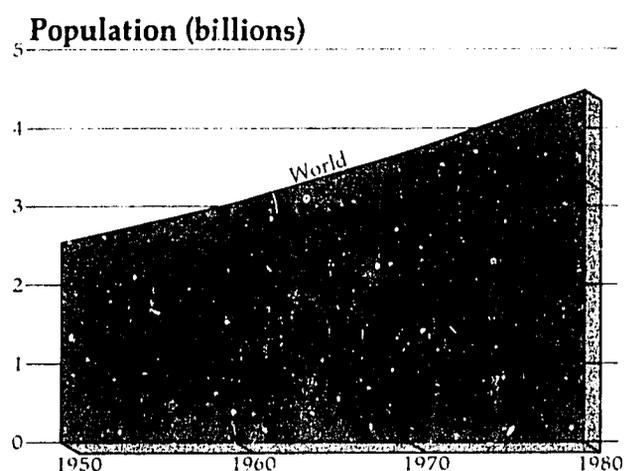
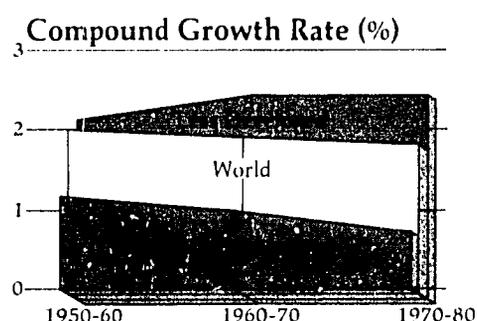


Figure 1.2b



Source: The Statistical Abstract of the United States, 1980 and 1984, U.S. Department of Commerce, Bureau of the Census.

Reproduced from T. Kelley White, "The Global Food System and the Future U.S. Farm and Food System," ERS/USDA, 1984.

in 1981, seven were LDCs (including China).

(2) Of the 25 nations with the fastest population growth (those with 5 million or more population), 11 were LDCs with per capita incomes of less than \$1,000 per year.

(3) Of the 24 nations with the slowest population growth, only Afghanistan filled the definition of poorer nation and its retarded growth rate may be largely explained by its prolonged internal strife. All others were developed nations.

(4) Even among developing nations, growth rates have declined, but the rates are still much higher than in developed nations (averaging about 2 percent annually for all developing nations and even higher in the poorer ones). Growth rates up to 4 percent are occurring in LDCs, many of which are currently among the poorest and most populated.

(5) The absolute number of people being added to the world's population continues to increase owing to the large initial population base to which the birth rates are applied. Most of this net addition is occurring in the developing world. Population growth in the developed world is approaching zero.

(6) During the 1970s, the population of the LDCs represented more than half of the world's population for the first time in recent history. Most of this population is in Asia and Oceania with significantly fewer people in Africa and Latin America. Present trends will only intensify the situation.

The immense population growth in developing nations since 1950 has resulted from high birth rates as well as dramatic reductions in death rates. Improved medical and health treatment have reduced death rates, especially among infants and children. Vaccinations and more modern medical treatment, though not universally available to all people and nations, have been used enough to significantly affect life expectancy and population levels. As the disadvantages of rapid population growth have been demonstrated, family planning and other population control programs have been initiated, but with varying degrees of success.

Despite continuing efforts to limit population growth, birth rates in developing nations continue at levels well above those that would permit a zero population change and stabilized population levels. Projections to the year 2000 are that population will continue to grow at near 2 percent a year in the developing world. Significant reductions in population growth will be difficult to achieve in these nations for several reasons:

(1) In total, one individual does not create excessive population growth. Just as one car does not pollute the atmosphere in New York, one person's family size does not create a population problem in Bangladesh. It is the collective impact of individual actions within the group that creates the excess. It is difficult to get one individual to see this and to act in the group's interest, especially if such action is not in his or her self-interest. In developing nations, limiting family size is not usually in the best interest of individual families, particularly in rural areas.

(2) In most societies, the decision to have children is a free choice, unencumbered by public regulations. Only in a few nations is this decision influenced sufficiently by government and public policy to have a meaningful impact on population growth (China being a good example). To make this approach effective, a society would have to be structured so that incentives to limit family size can be created by public policy. For example, a government may decide not to allow free schooling or free medical treatment for more than two children in a family. Most developing nations are not organized to create such incentive systems and most are not governed stringently enough to permit such control. Since most developing nations still retain a high sense of individuality, especially in family matters, widespread adoption of the Chinese experience would likely prove to be impractical.

(3) The agrarian nature of LDCs generates pressures that automatically encourage large families. Mostly, these revolve around the basic role of children in the household. In agrarian societies, children represent productive assets. They provide low-cost labor services for the farm and also earn income from non-farm employment, where available. With high infant mortality, a large number of live births ensures an adequate number of living offspring. Furthermore, most LDCs do not provide care for the elderly and a larger number of children helps ensure old-age security for parents. Since education is not always rewarded or valued in these societies, parents often tend to discourage their children from attending school. Time in school limits time for farm work and can also require out-of-pocket expenses, which parents do not have for books and clothes.

Most older Americans who grew up during this nation's rural, agrarian period will readily empathize with this type of value system. It was only after economic development occurred and the role of children changed that people in the United States (and other

Table 1.1 Population and Growth by Country, 1983.

World's Most Populous Nations		World's Fastest-Growing Nations (5 mil. or more)			World's Fastest-Growing Nations (5 mil. or more) (continued)			World's Slowest-Growing Nations (5 mil. or more) (continued)		
	Population (million)	Population (million)	Annual Growth Rate	Population (million)	Annual Growth Rate	Population (million)	Annual Growth Rate	Population (million)	Annual Growth Rate	
China	1,059.8	Kenya	18.5	4.1%	Uganda	13.8	3.0%	Belgium	9.9	0.1%
India	730.6	Saudi Arabia	10.4	3.4%	Zaire	31.3	2.9%	Italy	56.3	0.1%
Soviet Union	272.3	Syria	9.7	3.4%	Morocco	22.9	2.9%	Switzerland	6.5	0.2%
United States	234.2	Nigeria	85.2	3.4%	Egypt	45.9	2.8%	Czechoslovakia	15.4	0.3%
Indonesia	160.9	Iraq	14.5	3.3%	Sudan	20.5	2.8%	Netherlands	14.4	0.4%
Brazil	131.3	Rwanda	5.6	3.3%	Pakistan	94.8	2.8%	Portugal	10.0	0.4%
Japan	119.2	Malawi	6.6	3.2%				France	54.6	0.5%
Bangladesh	96.6	Tanzania	20.5	3.2%				Spain	38.2	0.6%
Pakistan	94.8	Zambia	6.3	3.2%	World's Slowest Growing Nations (5 mil. or more)			Japan	119.2	0.6%
Nigeria	85.2	Zimbabwe	8.4	3.2%	Afghanistan	14.2	-0.2%	Romania	22.6	0.7%
Mexico	85.2	Ghana	13.4	3.2%	West Germany	61.5	-0.2%	Soviet Union	272.3	0.8%
West Germany	61.5	Ivory Coast	8.9	3.2%	Denmark	5.1	-0.1%	Yugoslavia	22.8	0.8%
Vietnam	57.0	Niger	6.1	3.2%	Hungary	10.7	-0.1%	Greece	9.9	0.9%
Italy	56.3	Senegal	6.3	3.2%	East Germany	16.7	0.0%	Poland	36.6	0.9%
Britain	56.0	Algeria	20.7	3.1%	Sweden	8.3	0.0%	United States	234.2	0.9%
		Ecuador	8.8	3.1%	Britain	56.0	0.0%	Canada	24.9	1.0%
		Venezuela	18.0	3.1%	Austria	7.6	0.0%	Pakistan	94.8	2.8%
		Bangladesh	96.5	3.1%				World average		1.7%
		Iran	42.5	3.1%						

Source: U.S. Department of Commerce.

developed nations) found reason to voluntarily limit family size. The quality of life replaced subsistence as the family goal. In the process, children became economic liabilities rather than assets. The nation became more urbanized and fewer families and children worked on farms. To give children the education, training, and life style thought appropriate, it became necessary to allocate family income more wisely. The high cost of such items meant the number of children must fall in line more closely with family resources if all were to benefit somewhat equally.

This process appears to be among the most feasible for developing nations, difficult and long run though it may be. If incomes and education for rural residents can be improved, value systems can change and voluntary control of population can occur. Strong evidence worldwide shows that family planning and voluntary control of family size increase dramatically with improved education and higher incomes, which themselves are interrelated. Until these advancements in the lives of people become fairly widespread, it appears the population trends of the past 30 years in LDCs will continue much the same. Efforts at control through family planning will have some impact. But the problem is enormous and despite even moderate success, the poorer areas of the world least able to do so will be forced to deal with the desperate problems of how to feed a rising population.

Income Trends and Impacts

The rapid rise in population, since World War II has also been accompanied by economic growth in most nations. In fact, general economic improvement out-gained population growth to the extent that per capita incomes increased (Figure 1.3). The largest percentage increases in economic growth were recorded by developing nations, but some of this may be due to the low initial income base. The average increase of 3.1 percent from 1970 to 1980 actually exceeded that of the developed nations. Unfortunately the prosperity was not shared equally by all LDCs. The exceptions were the poorest low-income nations where population growth was most rapid and food production most limited.

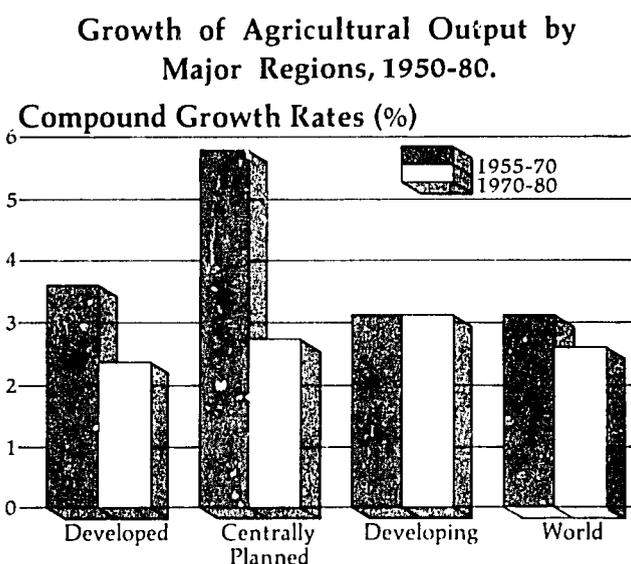
Today, a significant number of nations have per capita gross national products of less than \$300 per year (Figure 1.4). Most of these "very poor" nations are in Africa and Asia. Chad and Bangladesh are the two countries most often cited for their low average incomes. Among nations with per capita GNP above \$300 and less than \$1,000 annually, most are situated in these same regions of the world, but several nations from Latin America also fall into this income range. Only a handful of nations worldwide reach near the \$12,820 average found in the United States (Appendix Table 1.1).

Growth trends in per capita income for the period 1955-80 were slowed by the worldwide recession of the early 1980s. The efforts of developing nations

were also set back by the big rise in petroleum prices in the 1970s. Even now, civil turmoil and extreme weather conditions in some nations are taking their toll on food production and incomes. With population continuing to grow in the face of slowing aggregate income, per capita incomes in the 1980s are likely being reduced and are having a less important impact on demand for food than in earlier periods.

Data on average per capita income help show how income determines the demand for food, but the distribution of income is equally relevant. As suggested earlier, this absence of adequate income and purchasing power in the hands of large numbers of poor

Figure 1.3



Source: USDA World Agriculture Production Indices. Reproduced from same source as Table 1.2.

people defines the magnitude of the food issues. People without purchasing power cannot command food in the marketplace.

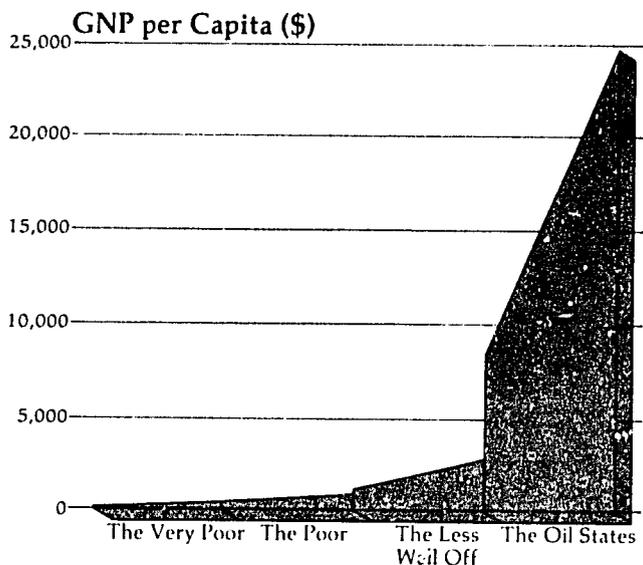
In most LDCs, the distribution of income favors rich people. A large portion of the population receives a small share of the nation's income (Figure 1.5 and Appendix 1.3). Among the most distorted distributions in LDCs, Kenya (in 1969) had 40 percent of the population receiving only 3.8 percent of the nation's income, while 68 percent of the income went to the highest 20 percent of the population. Other examples can be seen in Figure 1.5 and Appendix Table 1.2.

The importance of income distribution weighs heavily on issues of overall economic development and the ability of a nation to share its wealth with all of its people. There are no estimates of what distribution of income would be best for a nation. There is a tendency to favor "more equal as better."

Many nations, including developing nations, have adopted extensive public policies to redistribute income among their people. Welfare, social security, and

Figure 1.4

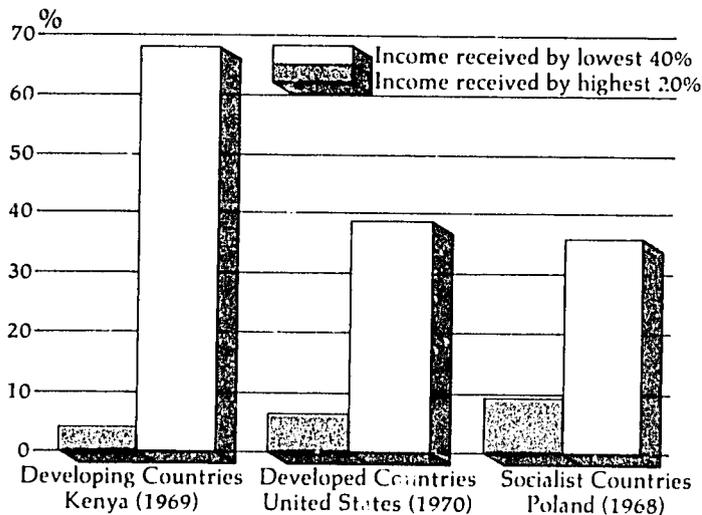
The Rich and No-So-Rich Nations of the Third World, 1982.



Source: World Bank, World Development Report, 1983.

Figure 1.5

Income Distribution in Selected Countries.
(For more complete listing, see Appendix Table 1.2.)



Source: Montek S. Ahluwalia, "Inequality, Poverty, and Development," *Journal of Development Economics*, 3 (1976), 340-41.

income taxes are a few obvious examples. However, developing nations generally lack the administrative structures or resources to implement such programs. More often they opt for cheap-food policies involving combinations of subsidies and price controls in an attempt to make basic food items available to larger segments of the population at a lower cost.

As will be suggested later, such policies are double-edged. Artificial control of consumer food prices increases demand at lower prices so that people con-

sume more and greater supplies are needed. At the same time, artificially low prices penalize farm producers who grow less at lower prices. Food shortages often result and these gaps are filled by food aid from developed nations. This is one of the great dilemmas facing LDCs.

Correcting highly distorted distributions of income in LDCs is a complicated task, but one that must be faced if the impacts of poverty are to be remedied. A more direct solution, now gaining widespread support as a development strategy, is to try to create more jobs. This places people in productive employment both in and outside of agriculture, thus providing income to buy food. A second aspect of the strategy is to allow greater participation of market forces in determining food prices and to reduce the reliance on controlled prices.

Overall Demand for Food

The combined effects of changes in population and per capita income determine the magnitude of the demand for food that must be met worldwide. Based on the trends of the past 35 years and the potentials for controlling population and improving per capita incomes, the most optimistic estimates place increases in the demand for food at about 2 percent annually. More pessimistic estimates place the growth at around 2.5 percent. This is the likely range of food need that will have to be met just to keep world conditions from deteriorating. Overall improvements in welfare will require higher levels of output. Also, rates in the poorer nations will be higher than the averages suggested above, probably by as much as 1 to 1.5 percentage points.

Growth in the demand for food will vary depending on the type of food. Estimates vary, but one provided by the USDA suggests greater increases for meat and oilseed foods and lesser increases for milk, cereals, and fibers by the year 2000 (Appendix Table 1.3). This estimate also reflects the differing needs of areas of the world based on population and income growth, plus preferences for food types. For example, Asia and China show a much greater preference for cereals than some other areas of the world. For the 20-year period from 1980 to 2000, the estimated annual percentage increase (not compounded) in food demand ranges from 3.2 percent for meat to 1.8 percent for milk and fiber foods.

There is a potential paradox that should be clarified with respect to the changing demand for food. In one sense, rising demand for food is a desirable trend since it suggests that more food is being consumed, with the benefits of improved nutrition and diet. But this will be the case only if the primary source of the new demand is from rising per capita incomes. If the increased demand for food is derived more from rising population than from rising per capita income, improvements in human welfare will be less likely.

Population growth adds only to increased food need, but does not contribute to the ability of people to obtain food. This ability occurs only with better incomes, production opportunities, or both. The immediate effect of population on food demand assumes that the new population also has income. For this reason, rising population in developing nations is often a strong deterrent to eliminating hunger and starvation if increases in income do not also occur. Too often, increased food output is needed merely to keep pace with rising numbers of people. Nations must "run just to stay even."

The Supply of Food

Like demand, the concept of the supply of food is an economic notion not readily understood. The supply of food is the amount producers are willing and able to produce at a given price. In general, producers willingly supply larger amounts of food at higher prices and lesser amounts as prices decline. Agricultural production is not just a biological process but a technical phenomenon as well that combines the elements of biological production with those of economic forces and management.

Care should be taken not to think of food production only in fixed physical terms. Those with such a view often conclude that the potential for improving food output is limited. They argue that since there are too few new land frontiers to open, the world's best farmland is already being farmed and available irrigation water supplies are already being used.

This view of food production ignores the importance of economic forces and human capability. Land and water availability are important to food production, but as they become scarce, economic forces create strong incentives to use them more efficiently. History shows us how new technology and management skills have increased the production from land and water resources as scarcity has grown. U.S. agriculture is an excellent example.

The amount of food supplied is determined by several interrelated factors. Among the more important general classes are the following:

1. The Level of Technology

Improvements in agricultural technology permit the production process to overcome the constraints imposed by scarcity. For example, if land is scarce, technology provides new seeds, fertilizer, and irrigation to increase the output per land unit. If labor is the constraint, new mechanical technologies evolve to replace labor and raise output per unit of labor. In all cases, new technology raises the food output for each unit of input. Developing nations have a particular potential to respond to new technology since their present "ways of doing things" use technologies that have existed in some cases for centuries. Dramatic production increases are possible. Backward technology characterizes the agricultural sectors of most

developing nations and largely explains their low agricultural output. Agricultural research is the source of most new agricultural technology and an effective extension service helps spread new ideas to the farm population.

2. Weather

The influence of weather on food production is critical in most LDCs. Output is most often determined by the timely arrival of rains since rain-fed agriculture prevails. Too often, weather extremes such as excessive rains or drought impose critical hardships on agricultural production. The difficult problems found in the Sahel region of Africa are an example of what extreme weather can do.

3. Natural Resources

Even though physical resources should not be viewed as fixed, their availability has obvious importance to food output. Good soil, water availability, and a moderate climate, which permits year-round cropping, are just a few examples of the advantages that come with natural resource endowments. Developing nations often have an abundance of many of these kinds of natural resources, the productivity of which can be enhanced by developmental programs.

4. Infrastructure

Food production is influenced by several aspects of the physical and institutional infrastructure available to farmers. The list is long, but includes such items as transportation, communications, electricity, roads, and storage facilities. Additionally, land distribution and leasing arrangements (land tenure), availability of credit, seeds, and fertilizer, the presence of water for irrigation, and the efficiency of the marketplace all affect the profitability of farming and the willingness of agriculturalists to produce food. In LDCs, many of these kinds of infrastructure and institutions have not been constructed or developed. Yet in many cases, they are so fundamental as to represent the first and most critical needs in LDCs. For example, without roads and economic forms of transportation, products cannot be moved profitably to the market for sale; without electricity, many aspects of life, especially in rural areas, are diminished. In the experience of many developed nations, infrastructure development was critical and often a first step. LDCs are finding the same to be true.

5. Producer Incentives

Production decisions are based largely on the rewards producers receive for their efforts. The combination of product prices and input costs in concert with the impact of technology, production risk, and other factors yields incentives or disincentives to producers. In some ways, LDC farmers are no different from U.S. farmers. They try to maximize the returns to their family efforts even though more food is consumed in the home and less is sold in the marketplace.

Unfortunately, the incentives for farmers in most LDCs are distorted by market structures and public policies, as mentioned elsewhere, which artificially hold prices in check and discriminate against agriculture. These are examples of a wide range of public and private institutions that serve agriculture and influence the agricultural sector.

6. Political Constraints

Public policies that maintain low food prices for consumers as a means of improving income distribution are a primary influence on producer incentives, but do not motivate farmers to produce more. Public policies on exchange rates, import/export controls, and input prices are just examples of other policies that influence farmer incentives. In addition, government stability seems to have a dramatic impact on national productivity. Constant shifts in political control are not conducive to prolonged and substantial improvement in food output. Developing nations seem to experience a great deal of political unrest, which often arises from pressures that accompany widespread poverty. Various political groups find poor and illiterate people prime targets for promoting particular philosophies of social organization and justice. It is not uncommon for 15 or more official political parties to exist in one developing nation.

7. Human Resources

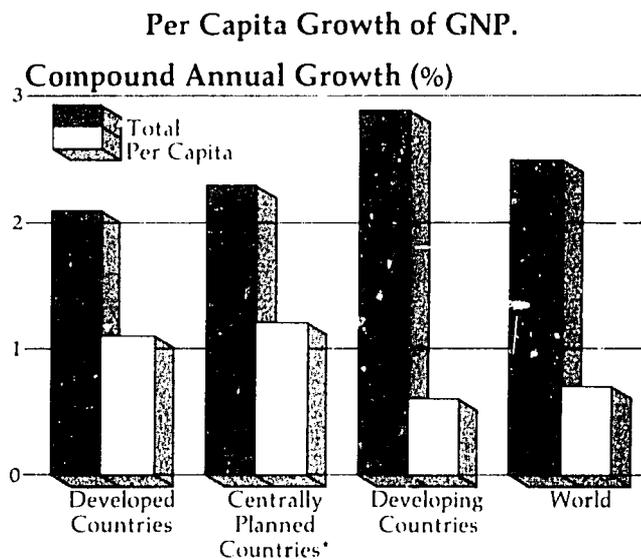
Agricultural production is critically influenced by both the quantity and quality of human resources. The importance of labor availability in agricultural production has long been recognized, but more recently the quality of labor has received greater attention. People, whether they are agricultural researchers or farm managers, make land and other resources productive. Most developing nations have yet to provide enough training facilities and opportunities to create a highly skilled labor force. In too many of these nations, illiteracy is high, skill training is low, and public schools are inadequate. The capacity of people to provide quality labor inputs and to command reasonably good employment options is severely limited. Studies suggest that even the acceptance of agricultural technology is higher with farmers who have had more education.

The interrelationships of the determinants of food supply create a complex mosaic that influences producer decisions. It is important to note that only two of the seven determinants listed above reflect natural, physical endowments. The rest are flexible and can be altered by individuals or society. Proper management of these alternatives can dramatically affect food output. The food production record since World War II suggests that at least moderate success has been achieved. For the future, there is general agreement among analysts that increased food production must come from within the LDCs. They have the capacity and it must be developed.

World Food Production

Evidence of growth in the food supply since World War II is encouraging in the aggregate. From 1950 to 1980, world agricultural production (excluding that from the People's Republic of China) grew at an average annual rate of 2.5 percent (Figure 1.6). The encouraging point of this trend is that developing nations fared better than average with a growth of 2.9 percent. Unfortunately, two of the primary problem areas, Africa and South Asia, grew at only 2.3 percent and 2.5 percent, respectively. Viewed for the more recent 10-year period (1970-1980), growth in world food output decreased to 2.2 percent, although developing nations held at 2.8 percent. Annual production in both Africa and South Asia fell considerably from their 1950-1980 trends.

Unfortunately, much of the improvement in aggregate food output in LDCs was washed out by increased population. Growth in per capita agricultural output averaged only 0.7 percent annually from 1950 to 1980 and declined to 0.4 percent for the more recent period, 1970 to 1980. Africa and South Asia again registered the least impressive results. In 1970-1980, per capita output in Africa fell by 1.3 percent annually, while in South Asia it grew only 0.1 percent. The present



*Excludes the People's Republic of China

Source: World Bank and USDA Economics Research Service.

Reproduced from T. Kelley White, "The Global Food System and the Future U.S. Farm and Food System," ERS/USDA, 1984.

situation in Africa is acute and widespread. Population growth is twice as high as in Asia and drought, floods, and civil unrest have exacerbated chronically inadequate diets.

Some may see these overall trends as discouraging. But in the face of rapid population growth and the wide range of production problems faced by most LDCs, their performance must, at a minimum, be heartening. Two features associated with the output trends are particularly noteworthy. First, the growth

in food output was broadly shared among regions and nations (Africa being the general exception). Second, most of the increased growth in agricultural output was associated with new technology, which produced higher yields per unit of input. Of the total increase in agricultural output, about 75 percent resulted from greater use of improved technology. The rest was derived from expanding the land area under cultivation.

Potential for Increased Food Production.

The possibilities for augmenting the output of food in the years ahead are excellent. This optimistic viewpoint is based on two primary conditions:

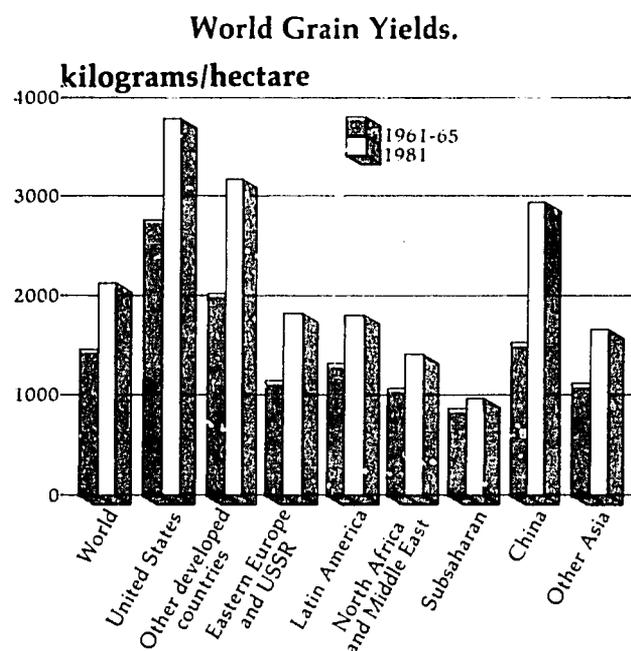
First, the efforts of the past 35 years have provided a diversified base of experience upon which to build. All developing nations now have some experience with developing programs and exposure to the issues their individual nations must face if they are to succeed in increasing agricultural output. These nations currently have development programs in place and efforts from this point forward can build on this base rather than begin at point zero.

Second, these past programs have established a significant technological base for agriculture that can serve as an impetus for the future. Development of technology is not as critical to improved agricultural production as it once was, although it must constantly be addressed in the interest of sustaining productive agricultural sectors in these nations. The point is that there is now more confidence that either the needed agricultural technology exists or that it can be adapted or developed under local conditions. In other words, the challenge of world hunger is not so much a technological challenge as it is a challenge to the political and popular will in both developed and developing nations. Success will be determined, in large measure, by how well these nations can create and implement effective programs and policies and forge a system and commitment with broad nationwide support. A long-term commitment from developed nations is also critical if developing nations are to sustain a growth strategy. As can be seen, the problem is immense and its solution must still be found. But the solution and future increases in food output must come from the LDCs themselves. While the United States and other developed nations might be able to produce enough to feed the world, such a massive transfer of food aid would be self-defeating over time.

Potentials for increasing domestic food output in LDCs can be illustrated from the regional disparity in world grain yields and the use of fertilizer and irrigation. In 1980, average grain yields in Latin America were only 83 percent of the world average. In North Africa and the Middle East they were 66 percent (Figure 1.7). The worst was in Subsahara Africa where grain yield averages were only 45 percent of the world average.

The reasons for these disparities are complicated and reflect complex developmental issues. But much can be explained just by the limited use of fertilizer and irrigation since these two inputs are critical to raising agricultural output. Two of the three regions mentioned above also lag behind the world average in the percent of cropland area being irrigated (Figure 1.8). North Africa and the Middle East showed considerable progress in irrigation use since 1980. But both Latin America and Subsahara Africa are well below the rest of the world. The progress of China in developing irrigation is particularly significant as are estimates showing that only 15 percent of the world's cropland is under irrigation.

Figure 1.7



Includes wheat, rice, barley, maize, oats, millet, and sorghum

Source: Same as Figure 1.1.

Fertilizer use in these same three regions is also desperately low, especially in Subsahara Africa (Figure 1.9). Fertilizer use there is only 12 percent of the world average and 7 percent of use levels in the United States. Latin America had a use level of 58 percent of the world average in 1980, and North Africa and the Middle East had a use level of 41 percent. Some improvement has been recorded since 1965, but it nowhere approaches the enormous need. China has shown dramatic improvement in fertilizer use, consistent with its extensive application of irrigation, and has the highest average use per hectare among developing nations.

Space does not permit a detailed analysis of the reasons for these disparate figures among regions of the world, but the data offer a fairly clear indication of both the deficiencies in agricultural input use and the production levels to which LDCs can aspire. In this way, the data support the position that the primary solution to the food production problem of the world should and can be found within the resource base and

potentials now present in the LDCs themselves.

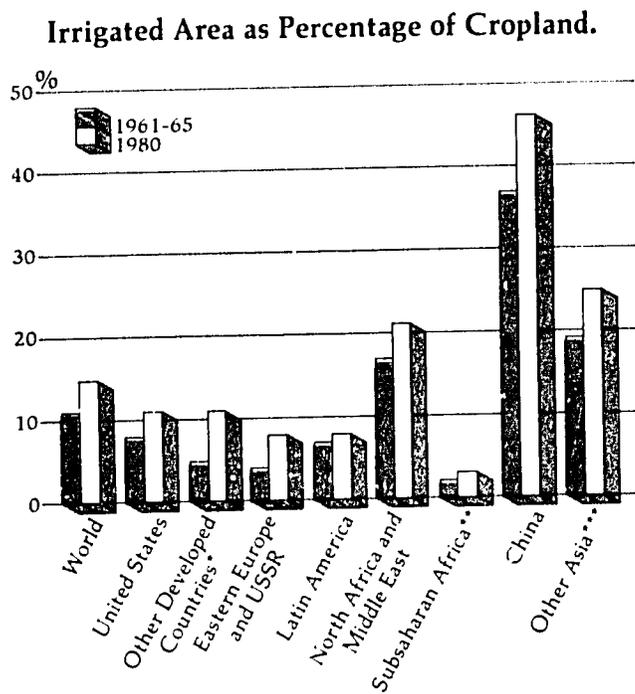
Strategies to increase food production in individual nations will vary to meet the special conditions of each. For example, strategies in a labor-surplus nation like Bangladesh will not advocate programs to displace labor with machines, while a nation like Bolivia, with extensive land areas and less population pressure, may find value in a strategy involving mechanization, at least in some regions of the nation. Beyond the need to be sensitive to local conditions, however, are several generalized issues that must be addressed as part of development strategies in all LDCs if success is to be achieved.

1. Focus on Agriculture

Planners and leaders throughout the developing world must better understand the basic importance of agriculture to overall economic development. Too often, agriculture is viewed as a tradition-bound sector with the sole mission of producing food. Agriculture is not seen in the broader context as the principal source from which overall development can emanate.

Briefly stated, rising agricultural production sets off a chain of changes throughout the economy that first results in farmers producing a food surplus for the home that can be marketed for cash. This money can in turn be used to purchase nonagricultural goods and services. As agriculture becomes more efficient, fewer people are needed in agriculture and some can migrate to nonagricultural employment where salaries might be higher. Since poorer people choose first to improve their diets, much of the new income is spent on food, which promotes agricultural progress and improves nutritional levels.

Figure 1.8



*Canada, Western Europe, and Oceania. Excludes Japan and South Africa
 **Includes South Africa
 ***Includes Japan

Source: Same as Figure 1.1.

Poor nations are dependent on poor farmers and a large proportion of their population is tied to the land. This high concentration of people in the agricultural sector is a fundamental characteristic that distinguishes low-income nations from industrial nations. Among the lower-income nations, for example, Chad has 85 percent of its population working in agriculture, Nepal 93 percent, Niger 91 percent, and Bangladesh 74 percent. Typically, upwards of 70 percent of the population in poorer LDCs is in the agricultural sector. By contrast, among the industrialized nations, the United States and England have 2 percent of their populations employed in agriculture, West Germany 4 percent, and Japan 12 percent (Appendix Table 1.4). In the early stages of development, agriculture provides the pool of labor for the economy. As development progresses the labor force exits to other sectors where higher returns are available. The essence of development is this movement of people out of agriculture, and for this reason rising agricultural productivity is viewed as the basic engine for overall economic progress.

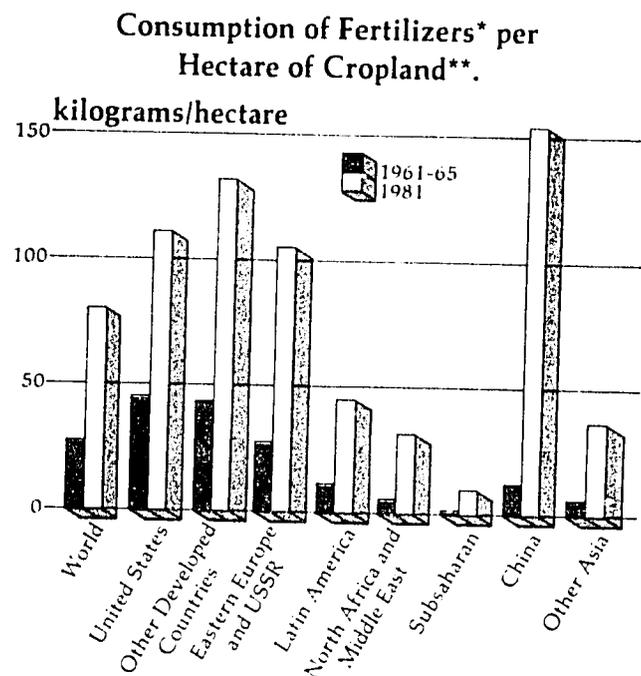
It is common in LDCs to acknowledge but not implement agricultural development as a high priority in national planning. This attitude needs to be replaced by one that guarantees higher investment of public funds in agriculture and long-run commitments to agricultural programs so the sector can fulfill its role in promoting overall economic progress.

2. Development of Scientific Base and Research/Extension Capability

Despite major progress in the development of agricultural technology, much remains to be done. Large gaps continue to exist between actual and potential crop yields, even among nations that have started to adopt new technology. Gaps also exist between experimental yields and those obtained by farmers. Extension of present knowledge must become more widespread.

A scientific research base is the key to the long-run success of the agricultural sector. Agricultural production is a dynamic process that requires a continuing flow of new information about complicated and sophisticated issues. Just because agriculture in developing nations is backward does not mean the problems are simple. For example, LDCs have an extremely high incidence of uncontrolled plant diseases and damaging pests that reduce crop output. Modernization of agriculture is the basis of increased food output and to accomplish this in so many diverse nations will require a huge effort. The special problems of each nation must be diagnosed and solved. Technical, scientific assistance must come first from scientists in the developed world, but ultimately local scientific capability must be developed. A long-term commitment is needed to ensure the creation of an effective and productive research and extension system.

Figure 1.9



*Phosphorus, Nitrogen and Potassium

**Arable land and land in permanent crops in FAO land classification

Source: Same as Figure 1.1.

3. Improved Human Skills and Education

The evolution of a quality scientific capability requires improved education and educational opportunities for large segments of the population. Quality universities are needed to train local students in the sciences and arts of agriculture. This level of training is needed to support the agricultural research and extension systems as well as the high government offices that set national policy and manage the investment of millions of dollars of public funds and development assistance from outside.

Beyond this need for higher education, there is an even more pressing need to eliminate illiteracy and provide job skills for masses of the population. Without these basic abilities, people's options are narrowed and their capacity to earn income becomes extremely limited. Many elements of the development process are curtailed by an unskilled labor supply. Both industrial and agricultural progress suffer. There is strong evidence that improved education results in development of modern agriculture. Better educated people more readily adopt new technology. They also tend to adopt family-planning methods. Perhaps more than any other factor, the future of the developing world lies with the people of these areas. People make the land productive and industry successful. Investments in both basic and technical skills will greatly improve the potentials for increasing agricultural output and all goods and services in these economies.

4. Public Policy and Economic Incentives

There is overwhelming evidence worldwide that farmers in developing nations, like those in developed

nations, are economically rational. Farmers invest their money, plant their crops, and adopt new production techniques when they believe such actions are in their best interest. The marketplace is an important institution in this process since it provides the information farmers need, especially with respect to prices of products they sell and the cost of inputs they buy. If the best decisions are to be made, this information must be accurate. This occurs when the prices accurately reflect the value of scarce products, services, and resources in the economy.

As development occurs, farmers in developing nations become increasingly dependent on the support systems to assist in production and marketing. Furthermore, they need help in learning how to gather, process, and use new and complex information. Finally, they need a government to monitor the activities suggested above to protect consumers and producers from the unscrupulous.

These types of interventions plus public policies represent an important set of government actions that affect incentives for farmers. Unfortunately, the response in most developing nations to most of these issues has not produced an effective system. Governments do not always clearly recognize their own role and the importance of investments in developing market efficiency. On the contrary, they often distrust the market and private sector and develop government agencies to carry out many of these functions. Likewise, policies needed to encourage production and development may in fact be counterproductive, such as those that fix prices to favor urban consumers at the expense of farmers. Ironically, these actions usually occur in nations where agriculture is less developed, where population is growing most rapidly, where expanded food production is most needed, and where the capacity to manage a highly planned economy is least.

The policy issues in developing nations are extremely complicated and cannot be addressed in this limited explanation. But it is clear that if efforts to increase the world's food supply are to be successful, a proper framework of public policies will have to be installed and monitored in the interest of creating an economic environment that provides production incentives.

5. Improved Employment Options

In a broader sense, the same needs apply to nonagricultural areas where production efficiency must prevail and the creation of jobs and employment should represent high priorities in the development strategy. As will be shown later, it is highly unlikely that agriculture will be able to absorb the annual growth in the rural labor force and give it employment as population continues to rise. In the long run, the solution to the plight of the rural poor will be found largely with alternatives outside of agriculture. Expansion of non-agricultural employment usually occurs first in small-scale rural industries of the cottage, handloom types

and in small consumer-goods industries. The service industries also provide important job options outside of agriculture. The evolution of employment opportunities will be made much more efficient if strong human capital and manpower development programs seek to train people and balance the variety of available technical skills with market needs.

Structuring a full-scale industrial development strategy and expanding the export base in LDCs would support the search for new employment options. Agricultural growth is the basis for overall progress and cannot be left unattended in developmental strategies. But where poverty is so rampant, as in LDCs, development of the other sectors must also be encouraged if employment needs are to be met.

6. Available Natural Resources

Improvements in food production will depend largely on man's ability to respond to the scarcity of natural resources. Major importance must be attached to the development of land and water resources and the influence of weather.

A large area of potentially arable land exists in the world that could be brought into production (Figure 1.10). Estimates vary and are probably imprecise, but they suggest that about 2.5 billion hectares are avail-

able that could ultimately be put under cultivation. About 1.4 billion hectares were in cultivation in 1970, which means the land area could be expanded by about 75 percent. Latin America offers the greatest potential (362 percent), while Africa's land availability could be increased by 206 percent. Most other areas have relatively little potential.

The government plays a critical role in maintaining an economic environment that gives accurate information to farmers. Its role is most properly identified with doing things to improve market efficiency, which individual farmers cannot do themselves. This may include providing roads and other forms of infrastructure, guarding against market imperfections such as monopolies, supplying price and market outlook information, standardizing weights and measures for all products, and establishing grades and standards for food products and farm inputs marketed in the system. Education, research, transportation, and communications are other services government should rightly provide.

The major impediment to developing these lands for cultivation is the lack of investment and strong economic incentives. Much of the land is currently used for livestock, located in marginal climatic zones, or situated in tropical areas where production of major grain and oilseed crops is not well developed. Production risks run high for these lands and efforts to develop them will be mostly long and arduous.

Water resources to expand irrigated agriculture are extensive but have been inadequately inventoried. Much of the world's surface water has been or is being developed, but the potentials for further expansion still appear promising. In many areas, development of rivers for surface irrigation must involve inter-country cooperation. In some cases territorial disputes among nations curtail progress.

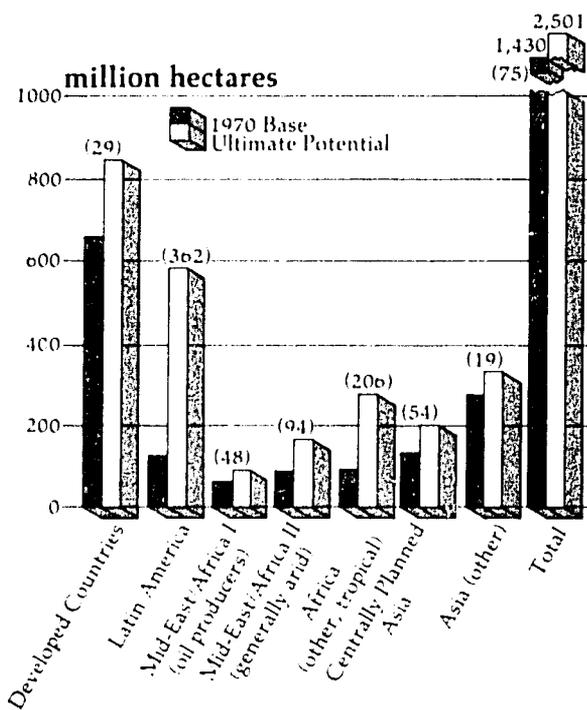
Subsurface water potentials are high even though extensive development in some regions has already caused water tables to recede. The biggest constraints are not knowing how much water exists and the recharging process for individual underground aquifers. Management skills and information are deficient in most LDCs and water policies and pricing strategies do not lead to efficient water use.

Development of irrigation and several other types of agricultural technology are mainly to assist man in the control of natural events. Flood, drought, plant and animal diseases, insects, and the like are just some of nature's ways that cause problems for agriculture. Man has been somewhat successful in lessening nature's impacts. With perseverance, developing nations will improve their ability to deal with nature's adversities.

Still, weather looms as a serious factor in attempts to increase food production. Extended droughts, major floods, and outbreaks of crop diseases can cripple agricultural production, sometimes for extended periods, despite the best efforts of government and individu-

Figure 1.10

Estimates of Arable Land in 1970 and Potential for Increase.



() Percent Potential Increase

Source: Derived from data in Alan M. Strout, *World Agriculture Potential: Evidence from the Recent Past*. Discussion Draft, Massachusetts Institute of Technology (Energy Laboratory) and Resources for the Future, Inc., March, 1975. Reproduced here from same source as Figure 1.2.

als. Fortunately, weather extremes tend to be localized, so while one area suffers others do not. This only highlights the interdependence of nations and the need for developing an effective system of response grounded in programs and policies that produce increasing amounts of food.

7. Continued Donor Support

Economic assistance from developed nations must continue if food production is to be improved in the next decade. Output in most LDCs is not far enough above subsistence levels for most people to permit extensive mobilization of domestic savings for investment in developmental programming. LDCs do surprisingly well, even now, in providing local resources for development efforts. But the task is too enormous and the outcomes too important to be left to anything short of our best effort. Developed nations must assume this commitment to fill the gaps in food and money until such time as developing nations can succeed.

Since World War II, several nations have reached developed status (for example, Taiwan and South Korea) and others have made significant progress. But a prolonged struggle lies ahead. As will be discussed later, there are many consequences to developed nations that come from providing developmental assistance to these nations. Many go well beyond a humanitarian response. The self-interest of developed nations is also served.

Conclusions

Successful strategies to end hunger and starvation for much of the world's populace will have to confront the unwieldy pressures of population. Rising population adds to the need for food but does nothing to create effective demand whereby people can purchase or produce food and other necessities. Further, population growth since 1950 has nullified some of the impressive gains in the production of food worldwide. The potentials for population control are restricted, given the pressures for large families inherent in highly agrarian societies. Formal education will likely be an effective control strategy, but that will take time and require more emphasis than it is now receiving in development programs.

Given this scenario, the option generally advanced for the present is to focus on increasing the supplies of food through self-reliance in LDCs themselves. Even with this option, there are serious obstacles. The most obvious is that people must have jobs and money if they are to benefit from higher food output. Developing nations now have 35 years of experience and many elements of a development strategy are in place. With the help of developed nations, LDCs have a good chance of increasing production and mounting an attack on poverty and population growth, plus improving employment options and personal incomes.

The tragedy in Ethiopia in the 1980s has brought the realities of developmental failures into vivid focus for much of the world. Such emergencies are the product of both internal strife and developmental failures in agriculture. Too many such failures in nations with strong population pressures could make the Ethiopian situation commonplace in 20 or 30 years. The response to this crisis by the United States, other donor nations, and large numbers of people acting independently has been impressive. Similar response has been repeated previously to meet many emergencies. Since 1964, the United States has assisted victims of more than 750 disasters in 128 countries. These disasters killed more than 2 million people and affected another 750 million. The United States provided \$2.4 billion in official disaster relief to help victims recover from these tragedies.

Herein lies a lesson. History now suggests that this nation and its people will always respond in times of world food emergency so long as they have the capacity. They will not sit idly by while other people starve and suffer. With this attitude, the question of U.S. assistance to these nations is no longer optional. It is a foregone conclusion that this nation will help. By so doing, the United States is assuming a significant share of the external costs of national developmental failures in LDCs.

Two roads lie before us: We can provide emergency relief in times of crises, which offers few, if any, long-run cures. Or we can provide developmental assistance to increase the innate productive capacity of these nations and prevent the rise of massive hunger and starvation. One way or another, Americans will meet this obligation. Their basic sense of right will not permit them to do otherwise.



Chapter 2

HISTORY AND NATURE OF U.S. FOREIGN ASSISTANCE

by E. Boyd Wennergren

The composition of today's U.S. foreign assistance has been evolving since the early years following World War II. U.S. economic aid began principally as assistance that could alternately be called economic, technical, or developmental. But in all cases its goal was to improve the economic welfare of those in less developed countries.

The rise of Cold War pressures in the 1950s added a new dimension, driven by political objectives in the name of what today is known as security assistance. Since then, the United States has expanded the scope of its economic assistance to include nations judged important to its foreign-policy strategy irrespective of their strict developmental need. Nations like Iran, Vietnam, Israel, and Egypt have been major recipients of both economic and security assistance.

U.S. foreign assistance today encompasses a composite of economic and military aid, and the former carries a mixture of developmental objectives in poorer nations and security interests throughout many other parts of the world.

To provide a more complete understanding of the nature and scope of the U.S. effort, this discussion will first deal with an overall description of foreign assistance. The focus will then narrow onto economic aid designed to meet the challenge of world hunger and U.S. security interests abroad.

Its Origin

Since the end of World War II, economic and developmental assistance to the less developed world has become an integral part of U.S. foreign policy. The genesis of its present-day scope and structure is found in the words of President Truman in his 1949 Inaugural Address, in which he said:

"Fourth, we must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas.

More than half the people of the world are living in conditions approaching misery. Their food is inadequate. They are victims of disease. Their economic life is primitive and stagnant. Their poverty is a handicap and a threat both to them and to more prosperous areas.

For the first time in history humanity possesses the knowledge and the skill to relieve the suffering of these people.

The United States is preeminent among nations in the development of industrial and scientific techniques. The material resources which we can afford to use for

the assistance of other peoples are limited. But our imponderable resources in technical knowledge are constantly growing and are inexhaustible.

I believe that we should make available to peace-loving peoples the benefits of our store of technical knowledge in order to help them realize their aspirations for a better life. And, in cooperation with other nations, we should foster capital investment in areas needing development."

Prior to 1949, the United States had only dabbled in international developmental cooperation. In 1942, the Institute of Inter-American Affairs was established to implement the first technical cooperation program supported in modern times by the United States. In 1948, the United States embarked on its effort of providing large amounts of capital for war reconstruction with the Marshall Plan in Europe. The overwhelming success of this plan strongly induced the United States to consider a broader effort among developing nations and to create the initial Point 4 program.

It is noteworthy that President Truman's official remarks made no reference to security assistance. Even so, the idea had been born with the Mutual Assistance Program in 1947—mostly to Greece and Turkey—designed to contain Soviet expansion following World War II. The concept was to evolve and expand in the years ahead through the Mutual Security Program (1951), the Security Supporting Assistance (1971), and finally the Economic Support Fund (1978). Economic assistance was also accorded a politically oriented role to help reconstruct devastated economies as a prerequisite for fostering political stability and the emergence of democratic societies. In the 1950s and 1960s, U.S. assistance programs expanded and the rationale shifted from reconstruction to security concerns. Developmental aid was at its core.

The United States has since become a preeminent donor in terms of total assistance offered. As a major world power, the United States has developed a tradition of assistance and leadership with tremendous potentials for doing either good or harm by its actions and policies. People in the developing world do not vote in America's elections or debate her policies. But their lives are often made better or worse by what happens here. Every administration since 1949 has supported foreign assistance as an essential part of this nation's commitment abroad. Still, the programs

have been controversial and often suffered a lack of public support.

Justification of U.S. Developmental Assistance

The same justifications for LDC assistance that stood in 1949 still apply today and are likely strengthened by the events that have happened since. The world has changed, nations have become more interdependent, and the need for action has intensified. The rationale for this commitment has several dimensions, ranging from a humanitarian responsibility to self-interest as reflected in the developmental and political priorities of the United States.

Humanitarian Responsibility

The humanitarian nature of world hunger alone is enough to justify U.S. participation. This was the primary motive in 1949. Most Americans can readily embrace the moral and ethical responsibilities inherent in this commitment. The critical need for food (discussed in Chapter 1) portrays a condition of misery and deprivation among many of the world's inhabitants. Whether one speaks of human rights or basic human needs, the right to food is fundamental. Discussions of these and other such issues as individual freedom, human dignity, and social justice become a mockery until the poor are adequately fed and clothed. The humanitarian basis of our economic and developmental assistance is deeply rooted in our national values, values that are just as strong today as they were in 1949, if not stronger.

Economic Benefits

While the economic interests of the United States may not have appeared as important objectives or justifications for U.S. assistance in 1949, it has since become clear that these interests are enhanced by U.S. efforts to help developing nations. Economic aid is not simply a drain on the resources and wealth of this nation. Economic interdependence has grown and the United States is as influenced by these changes as anyone and depends on world markets to maintain its own strong economy. Much of its export trade, especially in agriculture, is with LDCs. Furthermore, successful economic development in these nations can bring them into the orbit of trading partners with the United States as increased income fosters rising demands for imported goods and services. A healthy global economy is much more likely when the purchasing power of today's poor is improved and the mutually beneficial process of widespread exchange and international trade is set in motion. In the long run, improvements in the global economy and increases in worldwide food production will benefit large portions of the world's populace by improving the security of food supply and limiting pressures on increased food prices, both in the United States and abroad.

National Security and International Stability

The last chapter of this manual will discuss the forces and pressures that threaten international stability and the security of the United States and the potential role food availability might play. One of the more explosive forces in the world today is the frustrated desire of rapidly rising numbers of poor people to improve their standard of living. As the Presidential Commission on World Hunger observed in its 1980 report:

"The developing nations now actively involved in international affairs are resolutely determined to move into the modern world and secure its benefits for themselves. But as the aspirations and expectations of the developing world grow, poverty within it remains prevalent and conspicuous—with hunger as its quintessential symptom. As a result, hunger has been internationalized and turned into a continuing global political issue, transformed from a low-profile moral imperative into a divisive and disruptive factor in international relations."

Beyond its impact on international relations, political instability within the LDCs also retards economic improvement. Examples abound of how civil unrest has disrupted development programming in these nations. Hunger can create discontent, which contributes to unstable political processes and often to changes in national leadership, both of which limit the continuity of and commitment to development. Hungry people are difficult to rule no matter by what form they are governed.

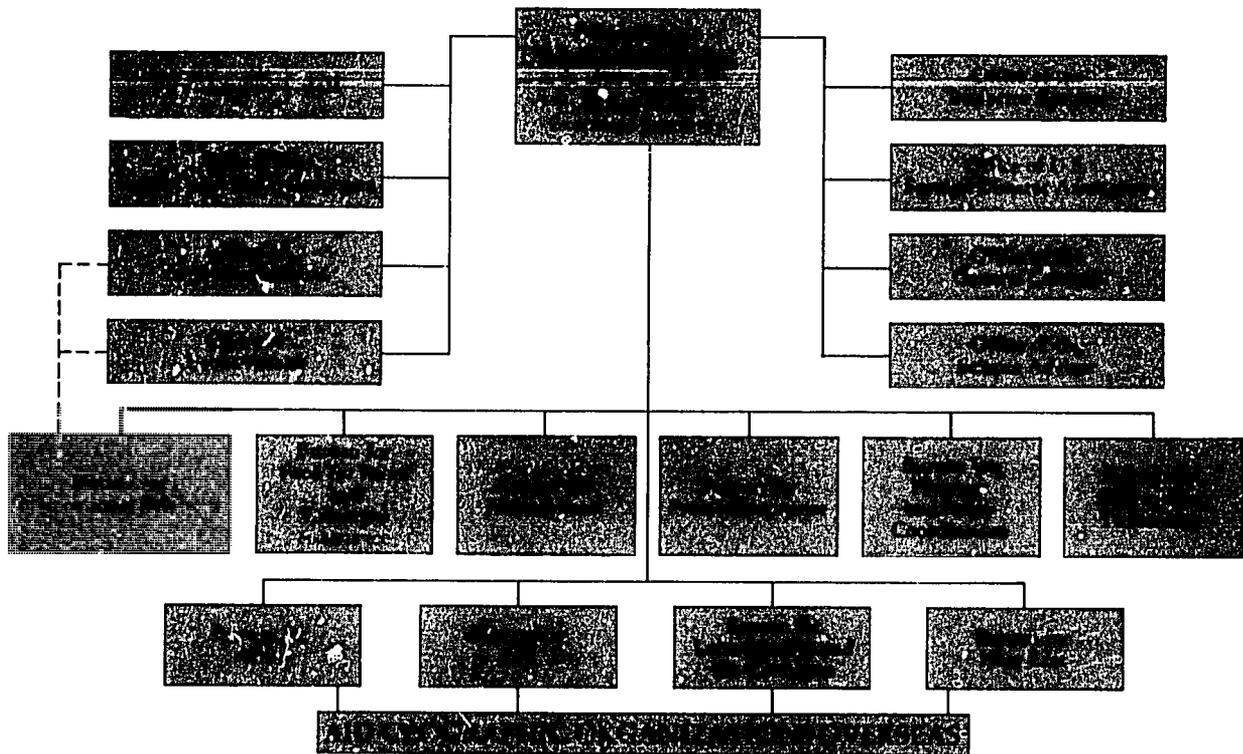
The Administrative Structure Supporting U.S. Assistance

The U.S. assistance effort is administered by the United States Agency for International Development (USAID). The agency's administrator is appointed by the President and reports to the Secretary of State. Funding for the agency and its programs comes directly from Congress via an annual budget submission under which Congress reviews, alters, and gives final approval to both money requests from USAID and its general program directions.

USAID today is the product of considerable evolution. Since 1949, the administrative structure and operational procedures have changed periodically, including several name changes. The name was last changed in 1961. USAID has an extensive organizational structure located both in Washington and in the nations where U.S. assistance programs operate. In Washington, the agency has four bureau offices that oversee developmental programming in Africa, Asia, Latin America, and the Near East (Figure 2.1). In addition, a large support structure provides guidance to all regional bureaus. For example, the Science and Technology Bureau has professionals who work with the regional bureaus to mobilize USAID technical compe-

Figure 2.1

Organization of the Agency for International Development.



tence, to provide advice on improving scientific competence in LDCs, and to manage centrally funded projects that operate in countries involving more than one regional bureau. The names of the various bureaus and offices illustrate the wide variety of program and administrative needs covered by USAID.

A mission director administers USAID programs in each developing nation. Normally, mission directors are career USAID employees who have progressed through the USAID system to leadership positions on the basis of merit. In limited cases, they are politically appointed. The rest of the in-country organization varies depending on the size and nature of the program. The mission usually comprises a deputy director, a controller, a program officer, and an administrative officer. Heads of divisions reflect the types of programs being implemented, such as agriculture and food, population and health, rural development, and so on. In addition, USAID personnel are given responsibility as project officers to supervise one or more active projects. All permanent personnel of USAID are appointed to the civil or foreign service. Most of the secretarial and other in-country support staff are recruited from the local populace. Americans serving in USAID missions normally are assigned for two years and often are extended for an additional two-year tour. The shortness of assignments and periodic rotation can be a problem to the agency since constant turnover can influence program continuity and the "memory" of the mission can suffer.

In recent years, USAID has employed about 3,500 technical and professional people (Figure 2.2). The number has declined slightly since 1980. The workforce profile reflects a variety of professional and technical specialties. Many have advanced university training and prior foreign experience, much of it with the Peace Corps. Ironically, relatively few have agricultural backgrounds and training. In 1982, only 250 were agriculturalists and a slight downward trend is expected by 1986. Since 1980 only about 7 percent of the USAID professional work force have been agriculturalists, but about 75 percent were posted abroad. The small number of agricultural specialists in the permanent labor force is a concern for an agency that stresses agricultural and rural development programs.

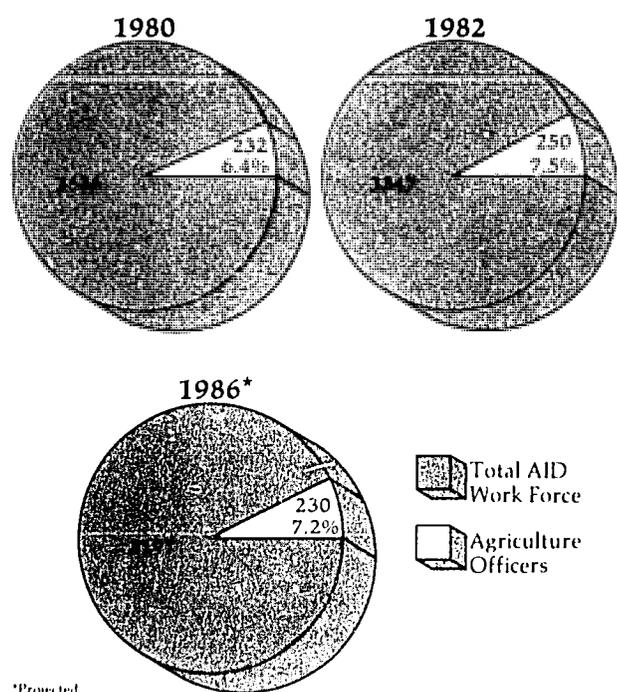
Elements of the USAID Program

Program Legal Basis

Development assistance programs administered by USAID are authorized under the Foreign Assistance Act of 1961, which is amended from time to time to meet changing world conditions and program needs. The agency also cooperates with the Department of Agriculture and the Department of State to implement the Agriculture Trade, Development and Assistance Act of 1954, more popularly known as Public Law 480 or Food For Peace. Under P.L. 480, surplus agricultural products are distributed free to nations that qualify based on need. The products are either

Figure 2.2

Agricultural Officers in the AID Work Force.



*Projected

Source: BIFAD, Budget Recommendations, 1985, Agency for Internal Development, February, 1984.

sold in the LDC and the funds used to finance development programs within the country, or they are distributed as wages to the poorer segments of society in exchange for work on local development projects. Mostly, these work projects involve construction of infrastructure such as canals, farm-to-market roads, and culverts and waterways. P.L. 480 food is also sold on concessional loan terms to LDCs. Low interest rates and long repayment periods characterize the loans. A variation to this arrangement, which started in the late 1970s, forgives loan repayment in cases where the LDC implements policies and procedures USAID considers vital to development. Emergency food, such as that sent to Ethiopia in the 1980s, is also authorized under P.L. 480 as well as from disaster relief.

The Trade and Assistance Act was initiated in the 1950s when agricultural surpluses were a major problem in the United States, but the disposal programs persist today. Wheat, corn, cotton, and dairy products have been the most important commodities used in P.L. 480 programs. The availability of these crops may be in doubt if U.S. agricultural policy is changed to reduce or eliminate these historical surpluses.

Classes of Assistance

The agency administers portions of two major classes of foreign assistance that reflect both the development orientation and the foreign-policy interests of the United States. Since the 1950s, these two have continually been intermingled, the confusing nature of which can be seen in the budget detail presented in the following section.

Foreign Economic and Financial Assistance

Foreign economic and financial assistance is mostly development oriented, and is classified under two broad categories, bilateral and multilateral assistance:

(1) **Bilateral Assistance.** Developmental assistance is one of the three major sources of economic assistance bilaterally managed by USAID. Together with Food Aid, it comprises all U.S. assistance obligated to LDCs under the direct bilateral control of USAID to satisfy purely developmental objectives. In other words, these are the funds expressly programmed for USAID to confront the issues of world hunger. Political and security issues have less influence on how these funds are allocated than is the case with other classes of assistance. All other assistance budgeted as bilateral is earmarked by Congress for specific uses, several of which contribute to the war on hunger. But administratively these appropriations are only monitored by USAID. Included are such programs as the Peace Corps and the Inter-American Foundation. Nondevelopment funds for narcotics control and refugee problems are under the jurisdiction of the Department of State.

In 1984, the budget items and proposed amounts listed under bilateral assistance represented 24 percent of total foreign assistance as follows:

	\$ Millions
Development Assistance:	
Functional Development	1,342.0
Sahel Development Program	103.0
American Schools and Hospitals Abroad	7.5
Disaster Relief	25.0
Operating Expenses (AID)	378.5
Foreign Service Reserve	34.0
Trade and Development Programs	22.0
International Narcotics Control	53.0
Inter-American Foundation	10.7
Peace Corps	108.5
Africa Development Foundation	3.0
Migration and Refugee Assistance	344.5
P.L. 480 (Food Aid)	1,052.0
Miscellaneous Trust Fund	9.7
Total	\$3,493.4

(2) **Multilateral Assistance.** U.S. multilateral support is channeled through several international banks and development funds, which have as their primary purpose to serve the needs of developing nations. The United States was instrumental in establishing most multilateral development banks (MDBs) and has traditionally viewed this participation as complementing its bilateral assistance program. These institutions receive support from many donor nations and are governed by multinational boards. Donor nations supervise budgetary growth and program priorities and performance. The United States partially supports about 10 such institutions including developmentally oriented agencies in the United Nations.

In 1984, U.S. multilateral aid accounted for 13 percent of total foreign assistance and was allocated as follows:

	\$ Millions
Multilateral development banks, of which:	
Inter-American Development Bank (IDB)	58.0
IDB Inter-American Investment Corporation	113.6
IDB Fund for Special Operations	20.0
World Bank (IBRD)	109.7
International Development Association	1,095.0
Asian Development Bank	6.9
Asian Development Fund	147.1
African Development Bank	18.0
African Development Fund	50.0
International Fund for Agricultural Development	50.0
International Organization and Programs	190.0
Total	\$1,858.3

The average U.S. share of multilateral development bank assistance is about 25 percent, ranging from 41 percent in the Inter-American Development Bank (IDB) to about 6 percent in the African Development Bank (ADB). The U.S. share has declined in recent years as the cost of supporting these institutions has become more equitable and widely spread among supporting nations. The fractional participation by the United States illustrates a commonly held misunderstanding that the United States is acting pretty much alone in assisting these institutions and developing nations. As further evidence, the World Bank, of which IDB is a part, receives funds from about 75 nations.

In contrast to the political orientation of much of the U.S. bilateral foreign assistance (mostly security assistance), the help funneled through MDBs tends to be oriented more toward the particular developmental needs of LDCs. For example, the African Development Bank reportedly provides 90 percent of its loans to countries with per capita GNPs under \$400. Also, in 1978, the Inter-American Development Bank established guidelines to allocate 50 percent of its lending portfolio directly to the poorest groups in borrowing nations. Aid to LDCs through multilateral institutions has consistently emphasized the development of agriculture, industry, physical infrastructure, and, to a lesser extent, social programs. Credit for agriculture and international imports has also been important.

U.S. interests are also served by funding passed through agencies of the United Nations, which, historically, have been seen as offering a viable and attractive assistance alternative to the controlled or targeted aid from Soviet Bloc nations. Within the United Nations system, the U.N. Development Program (UNDP) is the major international means of delivering multilateral technical assistance programs to the developing world. The World Health Organization (WHO) has a long-standing history of promoting health services and international health standards. The Food and Agricultural Organization (FAO), the World Food Program (WFP), and the World Food Council (WFC)

have been instrumental in drawing attention to the world food problem and providing initiatives for finding solutions. The Food Security Scheme, the FAO Global Information and Early Warning system, and the International Fertilizer Scheme are examples of such initiatives by these U.N. agencies. FAO's collection, analysis, and dissemination of data serve a broad clientele, both in development and international agricultural trade, and the United States has a large stake in these and related areas.

International Security Assistance

Security assistance funds are all managed bilaterally, but because of their broader political intent are budgeted under a separate category. Support for security assistance is an attempt to forge developmental objectives with the political and foreign-policy interests of the United States. Some see such a merger as a logical means of administering U.S. support to preserve its national independence, fulfill its role as a world leader, and facilitate the collective security interest of nations. Both military and economic aid are budgeted under security assistance.

An important part of the aid designed for security assistance is designated as Economic Support Funds (ESF). Nations receiving this aid are selected more for their security need than their developmental need. Owing to the developmental use of these funds, they are also managed by USAID. The funds are used to help promote economic and political stability in regions where the United States has special foreign-policy interests and has determined that economic assistance can help secure peace. For example, the major recipients of U.S. economic support since 1948 have been Iran, Vietnam, Israel, Turkey, and Egypt, a pattern of aid that closely traces the world's political trouble spots during that period.

In 1984, about 70 percent of security assistance was for military aid and peace-keeping activities. The military portions of security assistance do not represent the total of U.S. military commitments abroad. For example, Defense Department commitments abroad do not appear here. The total 1984 allocations to security assistance amounted to 63 percent of total foreign assistance, and were divided as follows:

	\$ Millions
Foreign Military Sales (FMS) (Forgiven Credits)	1,000.0
Guaranteed FMS Loan Commitments	4,658.0
Economic Support Fund (ESF)	2,949.0
Military Assistance Program (MAP)	747.0
International Military Education and Training (MET)	57.0
Peace-keeping Operations	46.0
Antiterrorism Assistance	5.0
Total	\$9,460.0

Development Program Priorities

Despite the intermingling of political and development objectives, U.S. development assistance to LDCs is driven, in degree at least, by concerns for the poor

and a desire to see the least privileged benefit from U.S. development assistance. The same strictness of intent has not always been applied to the use of security assistance. Congress exercises a strong influence over developmental assistance and has periodically established mandates to guide program development. For example, in the 1970s, Congress decreed an overall concern for the "poorest of the poor" and the "small farmers" in the developing world. The rights of all people to basic human needs (food, shelter, education, and health care) were set as new directions for USAID assistance. Since then, the participation of women in development and the rights of minorities to participate in development programs have also been stressed to help ensure broad distribution of the fruits of development. Congress has strongly opposed developmental programming that caters to entrenched elite interests or favors higher-income groups in LDCs. No program strategy can totally guarantee such outcomes, and strict adherence to such program directions limits flexibility and may not always promote the interests of development. But the intent of Congress has been clear and it has generally exercised a meaningful impact on USAID programs in LDCs. The most recent congressional directions have encouraged private-sector participation through more reliance on the marketplace to assist the development process.

In support of this basic philosophy, most USAID programming has stressed agriculture and rural development. USAID development assistance falls into four primary categories: (1) Agriculture and Food, (2) Population, Nutrition, and Health, (3) Rural Development, and (4) Public Administration and Policy. Each involves a wide range of subcategories, which generates an even greater diversity of individual projects. In the earlier years of USAID, focus was given to capital-intensive projects such as irrigation development, road construction, communications, rural electrification, and the like. More recently, the emphasis has shifted to projects with social dimensions and human development. Institutional building, agricultural research and extension, family planning, nutrition and health, policy dialogue, and more involvement of the private sector and market forces are the issues of development being stressed now.

Historically, these directions have not always found widespread support among developmentalists. Of particular note is the earlier focus on small farmers as the basis for development. Many found this approach ethically acceptable, but developmentally unsound. Small farmers are not always the most efficient. The lack of resources and production options on small farms makes them less capable than medium-size and larger farms of responding to new technology or the changing needs of a progressive agriculture. On the other hand, the recent focus on development of human resources and agricultural research and the increased importance assigned to economic policy and

the marketplace have merited support by most students of development in the Third World.

Some Concerns

A program as diversified as the one USAID is asked to administer and implement offers many potentials for dispute on both technical and practical grounds. Space does not permit a full-scale review of these issues. But two examples may help orient the reader to the kinds of concerns that surface from time to time.

On a broad philosophical base, the presence of USAID within the jurisdiction of the State Department is said to make its programs too much a tool of foreign policy instead of focusing only on developmental issues and those of the world food problem. The United States has never taken advantage of its food production preeminence (in wheat for example) to organize formal cartel-type arrangements with other producing nations to enhance its competitive edge as have petroleum-producing OPEC nations. Such an action would signal an official policy to use food as an overt weapon in foreign diplomacy.

As will be demonstrated more clearly later in this and other chapters, however, allocation of economic and food assistance (primarily as security assistance) is often highly correlated with politically sensitive areas of the world. Furthermore, in-country programs are sometimes influenced by nondevelopmental objectives. For example, withholding development assistance because of human-rights violations, or favoring specific programs to eradicate agricultural crops used in drug production, actions USAID has taken in the past, may have little relationship to national development or food production. These kinds of issues reflect the crux of one of the basic philosophical debates surrounding assistance programs today. Should our development assistance primarily reinforce U.S. foreign-policy objectives abroad or should it principally support developmental programs to help poor nations feed their people? At present, both purposes are being pursued under the auspices of USAID and a split budget allocation.

Another example, at a more practical level, is seen with USAID's Food Aid Program where two criticisms of using food as a developmental resource commonly are offered. First, sale of these commodities in developing nations tends to increase the supply and in the process lowers their in-country price. While this may make food available at a lower price to large segments of the populace, the lower price also restricts production incentives for farmers. A second criticism is that food aid can alter existing food systems and create a preference for imported foods over those produced locally. For example, the introduction of U.S.-milled flour under P.L. 480 typically has led consumers in LDCs to prefer it over locally produced flour. As a consequence, the demand for local flour is reduced and domestic producers suffer.

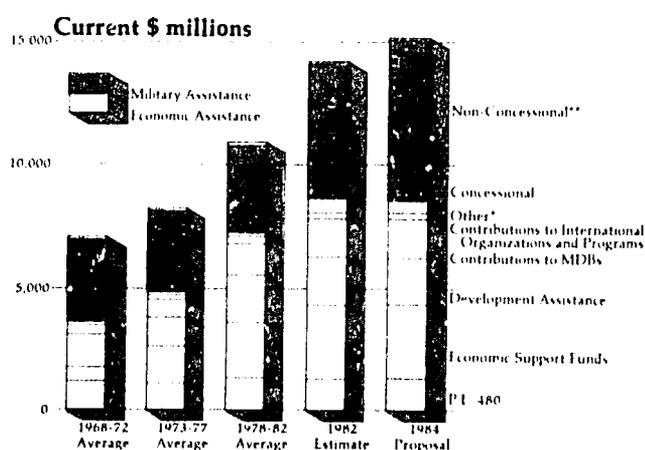
Extensive use of food aid as a development strategy is a likely signal that food shortage and not poverty is still recognized as the central issue of world hunger. Food aid likely serves best in emergencies and as a "stop-gap" at a critical period in the development process. At other times, if not introduced skillfully, it has the potential to harm development efforts.

Funding Support

Total U.S. support for all classes of bilateral, multi-lateral, and security assistance programs in 1984 was \$14.8 billion (Figure 2.3 and Appendix Table 2.1). The integration of developmental and nondevelopmental support is obvious from the way Congress allocates these funds. All economic assistance (including ESF) amounted to 56 percent of the total. From the \$8.3 billion assigned for economic assistance, USAID received \$1.9 billion (or 23 percent) to implement its developmental assistance programs and another \$1.1 billion (or 13 percent) for Food Aid. The Economic Support Fund (ESF) administered as security assistance and assigned on the basis of security and political considerations amounted to \$2.9 billion or 35 percent of all economic assistance, an amount about equal to that administered directly by USAID for developmental purposes. Most of the remaining funds for economic assistance went to developmentally related activities, except for \$444 million to narcotics control, peace-keeping operations, and refugee assistance programs. Since the late 1970s, economic support funds have increasingly exceeded those for developmental assistance. For example, in both 1983 and 1984, economic support funds were greater by about 55 percent.

Expenditures from 1968-72 (average) to 1984 (proposed) show this disparity as a long-run trend (Figure 2.4). During that period, development assistance declined from 37 percent to 22 percent of all aid classified as "economic." P.L. 180 funds fell from 33 percent to 16 percent. Conversely, economic support funds rose from 15 percent to 34 percent.

Figure 2.3
U.S. Foreign Cooperative Program Obligations



Source: 1968-82 inclusive, derived from annual data in *U.S. Overseas Loans and Grants* (Washington: AID, various years). 1983 *AID Presentation to Office of Management and Budget* (Washington: AID, October, 1982). 1984 *Congressional Presentation, Fiscal Year 1984* (Washington: AID, 1983). Reproduced herein from "The Commission on Security and Economic Assistance" (Carlucci Report).

*Includes *inter alia*, Peace Corps, International Narcotics Control, Peace-keeping Operations, refugee assistance programs, and the operating budget for the Agency for International Development, trade and development programs, the Inter-America Foundation, the Africa Development Foundation and the Miscellaneous Trust Fund.

**Loans at U.S. Treasury cost-of-money interest rates for purchase of military equipment and services.

Table 2.1 Top 30 Nations Receiving U.S. Foreign Assistance. 1980-1983.

GNP Rank*	F.A. Rank	Nation	Amount (\$ millions)
80	1	Israel	8,641.0
40	2	Egypt	7,147.7
57	3	Turkey	2,252.1
11	4	India	928.4
79	5	Greece	888.2
26	6	Pakistan	875.1
82	7	Spain	829.9
41	8	El Salvador	804.8
29	9	Sudan	727.1
65	10	Korea, Rep. of	705.7
37	11	Indonesia	663.8
2	12	Bangladesh	654.8
44	13	Philippines	644.5
72	14	Portugal	406.3
42	15	Thailand	394.5
47	16	Morocco	392.4
39	17	Honduras	368.6
63	18	Jordan	352.0
15	19	Somalia	346.2
55	20	Jamaica	337.5
58	21	Tunisia	333.6
27	22	Kenya	325.9
59	23	Costa Rica	303.8
53	24	Peru	298.8
23	25	Sri Lanka	284.6
54	26	Dominican Rep.	258.8
32	27	Liberia	241.2
**	28	Lebanon	222.9
45	29	Zimbabwe	189.9
83	30	Oman	147.1

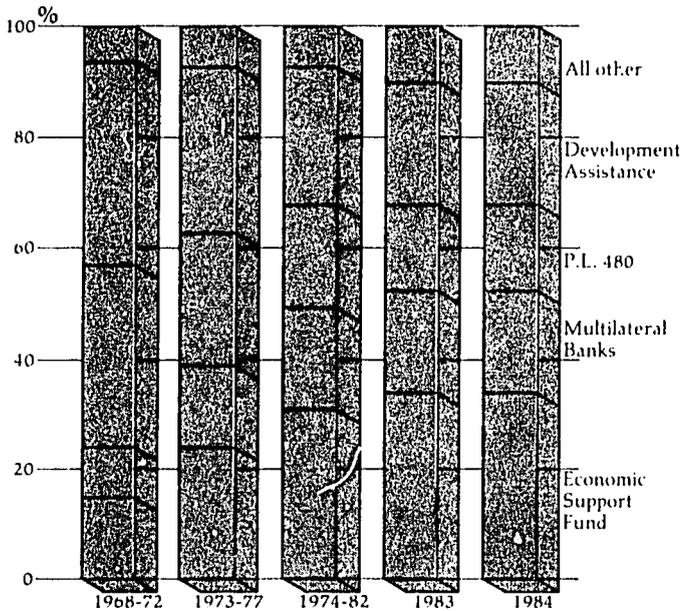
*Poorest nations are ranked as No. 1, 2, 3, etc.

**Data not available

Source: (1) World Bank, *World Bank Development Report, 1983*.
(2) USAID, *Overseas Grants and Loans*.

Figure 2.4

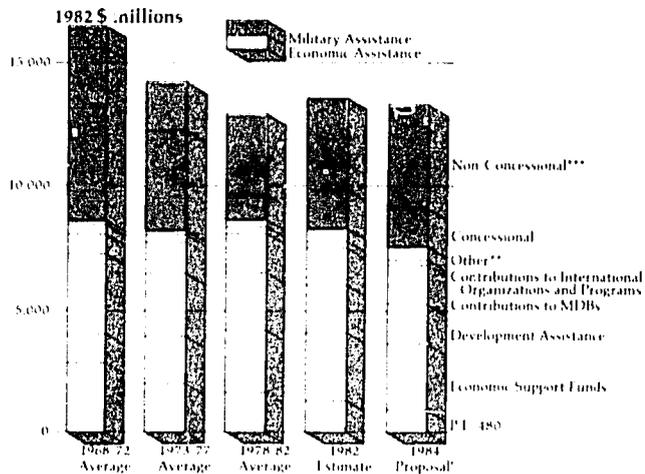
Composition of U.S. Economic Cooperation Programs.



Source: Calculated from gross obligations data in Figure 2.3.

Figure 2.5

U.S. Foreign Cooperative Program Obligations.



Source: Same as Figure 2.3.

Measured in current dollars, general economic assistance has increased consistently (Figure 2.3). Since 1968-72, total economic assistance has increased 135 percent. The greatest gains have come in economic support funds, which have increased more than fivefold. Development assistance for the developing world has risen only 36 percent, and P.L. 480 allocations have risen about 14 percent.

However, measured in real value of funding levels, the trends show a different picture (Figure 2.5 and

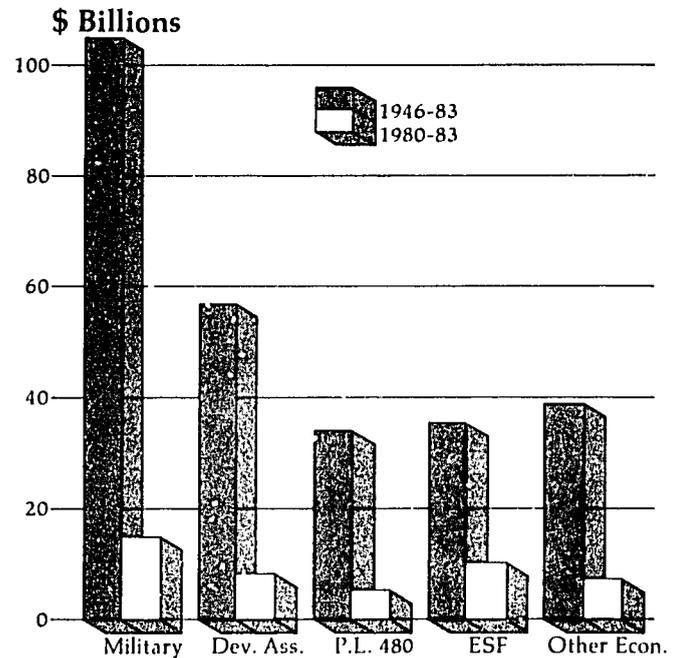
Appendix Table 2.2). Total economic assistance has fallen about 8 percent in real terms since 1968-72. The classes of assistance most affected by this decline are those designed most directly to help LDCs. Development assistance in 1984 was 46 percent lower and P.L. 480 funds were down 55 percent. By contrast, support through the ESF has risen 115 percent in real terms. The composite group of "other" assistance has risen 197 percent, with most of the increase going to narcotics control and peace-keeping operations.

Recipients of U.S. Foreign Assistance

Since 1946, some 150 nations have received U.S. foreign assistance. About 75 nations now receive American aid. Most are in Asia and Africa. Fewer nations receive aid in the Middle East while support for Latin American nations has been reduced considerably in recent years. Nations in Central America and the Caribbean are receiving more attention now, but the amounts of money, compared with other regions, are small.

Figure 2.6

Distribution of Total U.S. Assistance.



Source: U.S. Overseas Grants and Loans, USAID.

How Much and for What? To date, estimates show \$266 billion of U.S. assistance has been spread around the world. Of that, \$165 billion (62 percent) has been for all types of economic assistance and the rest for military (Figure 2.6). The longer-term allocations for economic assistance have favored development assistance. Of the total since 1946, 21 percent went to development aid while 13 percent was for ESF. P.L. 480 also received 13 percent and all other economic programs 15 percent. As will be shown later, however, recent trends favor security assistance.

Regionally, the largest amount has gone to the Near East and South Asia (\$84 billion) of which 56 percent was in economic assistance (Figure 2.7 and Appendix Table 2.3). East Asia received about \$66 billion with only 43 percent going for economic assistance. Far lesser amounts have been distributed to nations in Africa and Latin America. European countries received about 17 percent of all assistance, much of it following World War II.

Which Nations? Among individual nations, Israel with \$25.3 billion and Vietnam with \$23.4 billion top the list of all-time recipients (Appendix Table 2.4). This aid was mostly for security assistance (either military or from ESF). South Korea, Egypt, and Turkey have also received large amounts, mostly as security assistance. The major recipients of development assistance have been India, Pakistan, Indonesia, and the Philippines. Among other major recipients, support to Bangladesh has been almost totally for development assistance. Today, Bangladesh receives the largest amount of nonsecurity assistance of any nation—about \$150 million per year from the United States. Egypt and Israel continue to be the most highly aided nations, receiving mostly security assistance to support the Camp David Middle East peace initiatives.

Recent Trends. Allocation of foreign assistance since 1946 reflects the pressures experienced over this period, but does not show current conditions, which

can be seen from assistance disbursed since 1980 (Figure 2.6). For the period 1980-83, military aid still represented the largest single allocation with 32 percent of the \$46.8 billion total. The Economic Support Fund received 22 percent and development assistance only 18 percent. This represents a reversal of priorities from the long-run relationship identified earlier, and shows the growing importance of security assistance. Overall allocations for this more recent period show changes from those of the period 1946-83. The major difference was an increase of about 9 percent in security assistance at the expense of both military and developmental assistance.

The ranking of individual nations also shows some recent changes from those during 1946-83, but there is surprising similarity in the nations receiving aid between the two periods, especially for those receiving the larger amounts (Table 2.1). Among the top 10, Israel remains the largest recipient in 1980-83. Vietnam, Taiwan, and Japan have been replaced by Spain, El Salvador, and the Sudan. For the list of 30 top recipients for 1946-83, 18 still remain. Most of the changes have occurred in the last 10 places on the list where only Tunisia and Peru are found for both periods. Some of the more dramatic shifts in aid have been to nations in Africa, but the dollar amounts are nowhere near most of the larger recipients.

Need vs. Assistance. It has been observed previously that U.S. assistance is strongly oriented toward objectives broader than just economic development. This has been true since quite early in the program and it continues to the present. This picture can be illustrated by comparing the per capita GNP for individual nations (as reported by the World Bank) with the relative amount of foreign assistance each has received (Table 2.1).

Overall, there is very little correlation between the amount of aid received by individual nations for the period 1980-83 and their per capita GNP in 1982. (GNP is a measure of individual income; the lower the numerical ranking, the poorer the nation.) For example, Egypt and Israel, the two highest recipients of aid, ranked 80th and 40th on a list of GNP per capita for 87 nations (Table 2.1). In fact, among the list of the 30 largest recipients of aid only seven nations, Pakistan, India, Sudan, Bangladesh, Somalia, Kenya, and Sri Lanka, were also listed among the 30 poorest nations. At the other extreme, Chad, with the lowest GNP, ranked 78th on the foreign-assistance list. Of the 10 poorest nations, only Bangladesh was found among the 30 nations receiving the greatest aid.

Between 1980-83, the 30 poorest nations had only 16 percent of total U.S. assistance. The middle 30 nations ranked by GNP received 46 percent of the aid, while the 27 richest nations received 36 percent. Countries without GNP ranks were given the remaining 2 percent.

Part of the explanation for these relationships is found in the high proportion of military aid given to

Table 2.2 Top 30 Countries Receiving Economic Security Funds (ESF), 1980-1983.

GNP Rank	ESF Rank	Nation	Amount (\$ million)	GNP Per Capita (1982 dollars)
40	1.	Egypt	3,215.0	690
80	2.	Israel	3,140.0	5090
57	3.	Turkey	983.0	1,370
41	4.	El Salvador	309.0	700
26	5.	Pakistan	300.0	380
29	6.	Sudan	272.3	440
55	7.	Jamaica	190.9	1,330
45	8.	Zimbabwe	182.9	850
59	9.	Costa Rica	177.0	1,430
44	10.	Philippines	150.0	820
63	11.	Jordan	114.0	1,690
72	12.	Portugal	105.0	2,450
32	13.	Liberia	104.2	490
39	14.	Honduras	92.8	660
38	15.	Zambia	80.1	640
49	16.	Nicaragua	62.8	920
27	17.	Kenya	60.7	390
Unranked	18.	Cyprus	59.0	—
54	19.	Dominican Rep.	49.0	1,330
82	20.	Spain	48.0	5,430
15	21.	Somalia	46.0	290
Unranked	22.	Botswana	44.9	—
83	23.	Oman	35.0	6,090
Unranked	24.	Lebanon	20.1	—
42	25.	Thailand	14.8	790
16	26.	Haiti	11.0	300
Unranked	27.	Belize	10.0	—
51	28.	Guatemala	10.0	1,130
58	29.	Tunisia	10.0	1,390
Unranked	30.	Djibouti	6.0	—

Source: Same as Table 2.1.

Table 2.3 Top 30 Countries Receiving P.L. 480 Assistance, 1980-1983.

GNP Rank	P.L. 480 Rank	Nation	Amount (\$ million)	GNP Per Capita (1982 dollars)
40	1.	Egypt	1,151.8	690
11	2.	India	532.7	260
2	3.	Bangladesh	340.6	140
26	4.	Pakistan	307.7	380
37	5.	Indonesia	238.1	580
53	6.	Peru	147.6	1,310
47	7.	Morocco	145.5	870
29	8.	Sudan	139.1	440
15	9.	Somalia	138.1	290
41	10.	El Salvador	115.2	700
23	11.	Sri Lanka	105.6	320
Unranked	12.	Poland	102.9	—
36	13.	Bolivia	99.9	570
54	14.	Dominican Rep.	82.9	1,330
16	15.	Haiti	81.0	300
27	16.	Kenya	79.0	390
44	17.	Philippines	66.2	820
55	18.	Jamaica	64.7	1,330
33	19.	Senegal	58.6	490
Unranked	20.	Kampuchea	58.3	—
65	21.	Korea, Rep. of	54.1	1,910
58	22.	Tunisia	54.3	1,390
25	23.	Ghana	53.1	360
38	24.	Zambia	51.8	640
7	25.	Zaire	50.7	190
32	26.	Liberia	50.6	490
59	27.	Costa Rica	49.5	1,430
9	28.	Upper Volta	41.3	210
39	29.	Honduras	39.0	660
14	30.	Tanzania	38.9	280

Source: Same as Table 2.1.

some nations with higher incomes (Appendix Table 2.5). For example, 67 percent of Israel's assistance was military aid. Likewise, 39 percent of Egypt's aid was military. Despite these and other individual examples, there is still a strong tendency for the same nations to appear as major recipients for all classes of aid, and for the amounts to be unrelated to their income rankings.

Economic Security Funds. A good example of this relationship, and one not unexpected, is the allocation of ESF for the period 1980-83. Generally, recipients of these funds reflect foreign-policy interests of the United States, not all of which are military. Egypt, Israel, and Turkey head the list of ESF recipients (Table 2.2). Of the top 30 nations receiving this aid, only five were also ranked among the 30 poorest nations.

Regionally, the allocation of the ESF follows closely the political and military stress found in regions of the world. In the 1970s, Asia (Vietnam) occupied U.S. attention, but since 1975, and especially 1977, the Middle East (Egypt and Israel) has received a large portion of the ESF support. In fact, aid to Egypt and Israel, measured either in total or ESF, is about equal to that received by the rest of the developing nations. Since 1981, Latin America, particularly Central America and the Caribbean, has received added ESF assistance.

Table 2.4 Top 30 Countries Receiving Development Assistance (D.A.), 1980-1983.

GNP Rank	D.A. Rank	Nation	Amount (\$ million)	GNP Per Capita (1982 dollars)
11	1.	India	395.2	260
2	2.	Bangladesh	313.6	140
37	3.	Indonesia	290.8	580
23	4.	Sri Lanka	176.7	320
41	5.	El Salvador	175.0	700
44	6.	Philippines	154.0	820
53	7.	Peru	124.5	1,310
39	8.	Honduras	113.9	660
29	9.	Sudan	112.5	440
42	10.	Thailand	99.2	790
27	11.	Kenya	90.9	390
34	12.	Yemen, Arab Rep.	82.4	500
84	13.	Italy	73.1	6,840
54	14.	Dominican Rep.	71.0	1,330
55	15.	Jamaica	66.7	1,330
59	16.	Costa Rica	63.8	1,430
15	17.	Somalia	65.7	290
56	18.	Ecuador	59.6	1 350
4	19.	Nepal	56.7	170
33	20.	Senegal	55.1	490
21	21.	Niger	52.2	310
5	22.	Mali	49.5	180
16	23.	Haiti	48.6	300
48	24.	Cameroon	48.4	890
14	25.	Tanzania	47.2	280
*	26.	Lebanon	45.6	—
47	27.	Morocco	44.1	870
35	28.	Lesotho	42.8	510
32	29.	Liberia	40.9	490
51	30.	Guatemala	37.4	1,130

Source: Same as Table 2.1.

P.L. 480. About one-half of the nations receiving the largest P.L. 480 aid are also among the largest recipients of ESF (Table 2.3). Nations receiving food aid tend to reflect more closely developmental needs and interests, but the list does not conform too closely to rankings based on GNP. Eleven of the 30 highest recipients of food aid are also among the 30 poorest nations, but six of those on the list have GNP in excess of \$1,300 annually. One reason for the latter group may be that P.L. 480 is flexible and can be used in ways other than just for food grants and emergencies. As indicated earlier, food aid can be provided as loans, and in selected cases where economic policy reforms occur consistent with development objectives, the initial loan can be forgiven. This flexibility permits P.L. 480 assistance to be adjusted to meet local conditions and provide policy incentives for any class of LDC. This may partially explain the pattern of use in recent years.

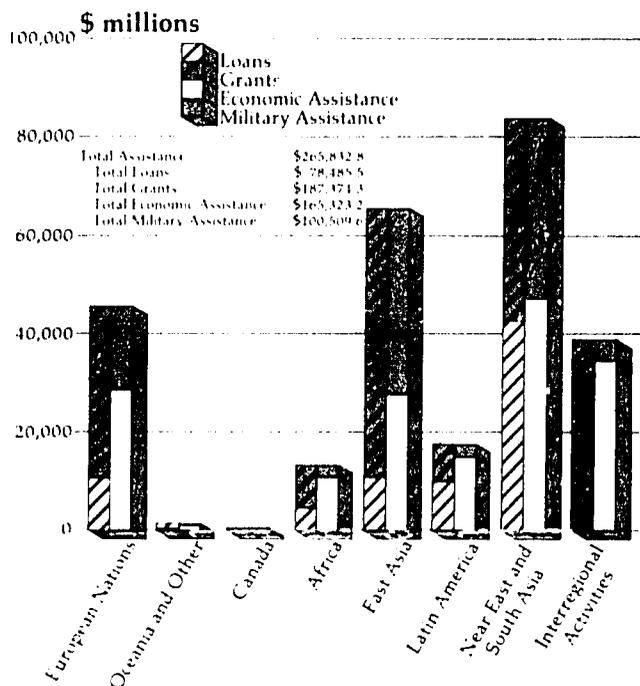
Developmental Assistance. The major recipients of developmental assistance do not include Egypt or Israel (Table 2.4). The largest recipient from 1980-83 was India, followed by Bangladesh, both of which represent important developmental situations among the poorer nations. Seven of the top 30 nations have per capita GNP of more than \$1,300 annually, but the

remaining major recipients all have GNPs less than \$900. This distribution is similar to that for P.L. 480.

Any breakdown of U.S. economic assistance reveals the often-made point of the intermingling of developmental and foreign-policy goals. This mix has become ingrained over time and reflects the expressed intent of the United States to help its friends. The absence of a direct correlation between need and aid for individual nations may be of some concern since a closer relationship might reflect a more direct impact on the world food problem.

One added factor conditions these trends, especially since 1980. Much of the present need identified worldwide exists in Africa, and the stronger focus there is fairly recent. During the 1960s and into the 1970s, more attention was given to Asia and Latin America and less to Africa. With this present shift, Africa is likely to receive more funds to meet its greater need. Even so, there are limits to how fast and how extensive this change can be. Despite their poverty, poor nations are not always capable of absorbing large amounts of aid. Programming and use of external assistance will be most effective if the process is based on previously established in-country capability. Some of the important preconditions are improving the inadequate human capital base, updating outdated government institutions, and improving ineffective public policies. To inject huge amounts of assistance into the economy of ill-prepared small nations would be wasteful. Gradual build-ups of programs and aid have often proved most effective.

Figure 2.7
Distribution of U.S. Assistance, 1946-83.



Source: U.S. Overseas Grants and Loans, USAID.

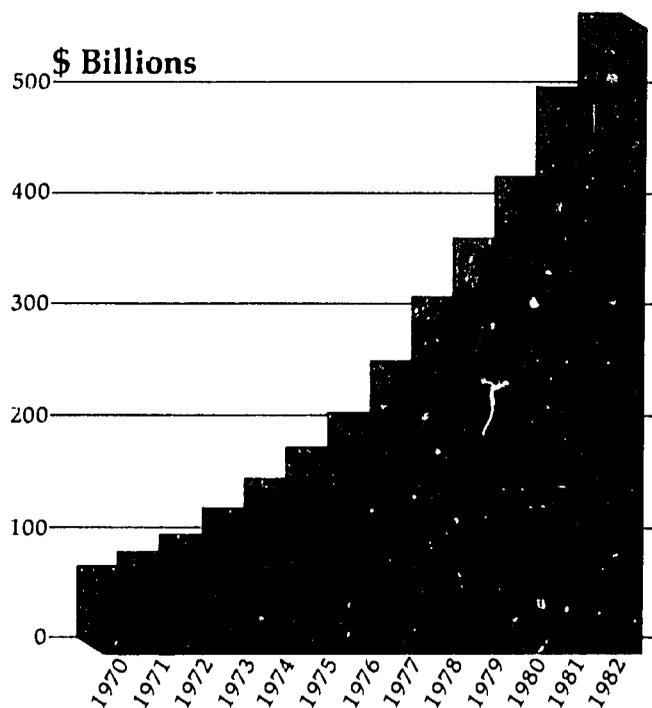
Type of Funding

Bilateral assistance is provided as both grants and loans to developing nations. Grants are strictly gifts and are generally based on need and the inability of nations to assume loan repayment obligations. Consequently, bilateral grants tend to go to poorer nations. But the history is mixed. All economic security funds are given as grants. Loans for other classes of assistance are always made at concessional rates of interest, which range from 2 to 4 percent annually, and also incorporate long repayment periods of up to 40 years. Loans usually provide a grace period of 5-10 years during which repayment of principal is delayed but interest obligations must be met.

Since 1946, about 70 percent of all U.S. aid has been disbursed as grants (Figure 2.7). Most of the assistance to European nations has been grants, much of it in the aftermath of World War II. Overall, grants have been most common to nations of Oceania, East Asia, and Africa. More recent trends show an increasing emphasis on loans. For 1966-70, loans accounted for 36 percent of total bilateral assistance, but rose to 50 percent by 1981-83. Despite the trend, grants still play an important role in U.S. assistance.

Nations obtaining loans must repay them, and the history has been fairly good (Appendix Table 2.7). Since 1946, the United States has loaned about \$78.5 billion had been repaid as principal and interest. The data do not separate principal and interest repayment had been repaid as principal and interest. The data do not separate principal and interest repay-

Figure 2.8
Outstanding Debt of Developing Nations.



Source: World Bank, World Development Report, 1983.

ments, so it is difficult to estimate the proportion of interest repaid. Most loans to developed nations have been repaid with interest. Most other loans are likely on schedule for repayment, even among LDCs. USAID policy decrees that LDCs must remain current on their repayment of outstanding loans or other assistance will be discontinued. Even though this policy sometimes causes stress for money-short LDCs, it has generally been adhered to.

Problems of Debt Management

Financing for the development programs of LDCs is only partially provided by official assistance from donor nations such as the United States. Developing nations also borrow from private banks, and private investment flows into these nations in response to private-sector initiatives. The relative importance of various sources of financing depends largely on the development progress of the nation. The more developed the LDC the greater its credit worthiness and capacity to command commercial financing. For example, in 1982, 90 percent of the capital inflow into lower-income LDCs came from official development assistance and only about 1 percent from private sources. For middle-income LDCs, about 45 percent came from private investment and 10 percent from official donor assistance. Among the developed nations giving donor aid, 26 percent came from OPEC nations, 6 percent from Socialist Bloc nations, and 68 percent from other nations, including the United States.

The composite effect of various forms of borrowing on developing nations has been a large rise in their medium- and long-term debt (Figure 2.8). This debt has risen from \$69.4 billion in 1970 to \$548 billion in

1982. Official debt represented 36 percent while the rest was in private hands. The average interest rate on total LDC debt increased from 6.3 percent in 1970 to 8.9 percent in 1980. Interest payments on medium- and long-term debt for LDCs amounted to \$50 billion in 1982.

Payment of this debt represents a big hurdle for developing nations as they continue to strive for economic progress and independence. Exports (foreign exchange) are the resource most needed to service these debts, but most developing nations find themselves with limited export capability. Their imports traditionally exceed exports, creating a negative balance of payments. In 1982, the composite net negative balance of trade for LDCs was \$118 billion. In the face of adverse balances of payments, the debt-management situation for developing nations is worsened.

U.S. Capacity to Support Economic Assistance

Opponents of U.S. economic assistance often argue that too much money is provided for these programs, money they say could be used more productively at home. They also suggest that the United States is carrying too much of the burden of assisting poor nations and that other developed nations should be encouraged to do more.

Several points bear on these arguments. First, foreign-aid programs represent less than 1 percent of this nation's total budget. Programs related strictly to development efforts account for much less, especially if ESF totals are excluded. This is small compared with the large amounts spent on items like defense. It is a

Table 2.5 Net Official Economic Assistance to Developing Countries and Multilateral Agencies.

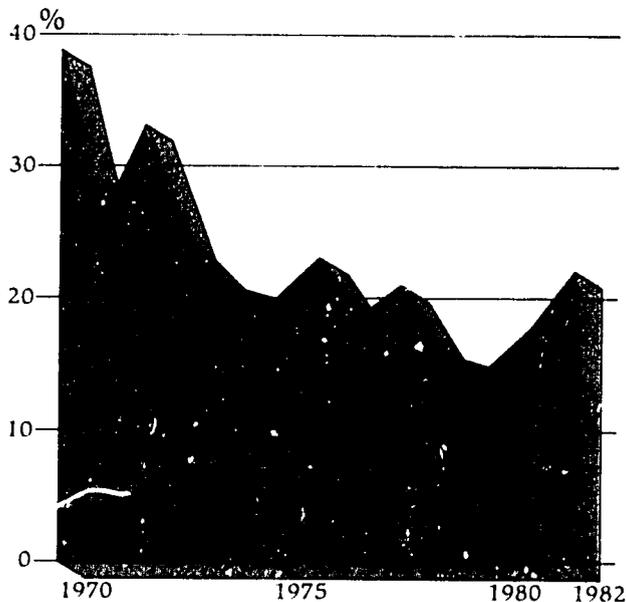
Countries	(\$ million and percent of GNP)							
	1973-73 Average		1980		1981		1982	
	\$ M	as %	\$ M	As %	\$ M	As %	\$ M	As %
Netherlands	282	0.59	1,630	1.03	1,510	1.08	1,474	1.08
Sweden	211	0.50	962	0.79	920	0.83	987	1.02
Norway	64	0.40	486	0.85	467	0.82	559	0.99
Denmark	100	0.46	481	0.74	403	0.73	415	0.77
France	1,286	0.63	4,162	0.64	4,177	0.73	4,028	0.75
Belgium	191	0.11	595	0.50	575	0.59	501	0.60
Australia	266	0.54	667	0.48	650	0.41	882	0.57
Austria	23	0.11	178	0.23	313	0.48	354	0.53
Germany	881	0.32	3,567	0.44	3,181	0.47	3,163	0.48
Canada	457	0.42	1,075	0.43	1,189	0.43	1,197	0.42
United Kingdom	648	0.41	1,852	0.35	2,191	0.44	1,793	0.38
Finland	21	1.42	110	0.22	135	0.28	144	0.30
Japan	711	0.23	3,353	0.32	3,171	0.28	3,023	0.29
New Zealand	21	0.23	72	0.33	68	0.29	65	0.28
United States	3,242	0.28	7,138	0.27	5,782	0.20	8,202	0.27
Switzerland	53	0.16	253	0.24	237	0.24	252	0.25
Italy	159	0.13	683	0.17	665	0.19	812	0.24
Total								
DAC Countries	8,616	0.33	27,264	0.38	25,634	0.35	27,851	0.38

Source: World Bank, World Development Report 1984, p.252.

mistake to pit any group of expenditures in the national budget against money spent to assist poor nations. The implication of doing this is that reducing the latter would have significant impacts on U.S. domestic programs or lead to meaningful reductions in the national debt. This is not so. A redirection of development assistance by as much as one-half would have a miniscule impact on either domestic programs or the national debt.

The measure of this nation's capacity to assist poorer nations, however, is not best expressed as a percentage of the national budget. It should be compared against the nation's ability as reflected in its overall wealth or GNP. Since 1949, the total expenditures for economic assistance have been rising, but so has this nation's GNP. In 1982, these expenditures represented only 0.27 percent of the GNP of the United States (Table 2.5). This is about the same propor-

Figure 2.9
U.S. Share of World Development Assistance.



Source: *The Development Assistance Committee Aid Review (78) 4*, September, 1978 for U.S. ODA volumes, 1970-77 and remaining data from *Development Cooperation Review for 1982 and 1983* (OECD: Paris).

Note: Fluctuations in U.S. share registered after 1978 reflect timing of recording by DAC of U.S. contributions to multi-lateral agencies.

tion as has persisted since the early 1970s. In 1960, however, the percentage was 0.53.

The 1982 figure places the United States 15th on a list of 17 major developed nations that offer economic assistance. Only Switzerland and Italy gave a lower proportion of their GNP than the United States. Nations such as Sweden and the Netherlands gave slightly more than 1 percent.

The United States still leads all nations in total aid provided, followed by France, Germany, and Japan. The \$8.2 billion shown as economic support in Table 2.5 for 1982 includes economic security funds associated with security assistance. Even so, the contribu-

tions from other nations have been increasing relative to those of the United States (Figure 2.9). In 1970, U.S. contributions accounted for about 38 percent of all economic assistance from donor nations. Since then, U.S. contributions have consistently declined to a low point of about 14 percent in 1980. Increases have occurred in recent years and in 1982 U.S. aid reached about 22 percent of the world total.

These trends, coupled with the earlier demonstration that real expenditures have been declining, indicate a weakening of the funding commitment of the United States to developmental assistance.

A final comparison is shown in Figure 2.10. Compared with 14 major classes of personal consumption in the United States in 1982, the \$8.2 billion in official economic assistance ranked last. For example, Americans spent \$51 billion on alcohol and \$28.3 billion on tobacco products. In other words, Americans spent six times more money on alcohol than on assisting the world's poor. In fact, more was spent in barber and beauty shops than on economic assistance.

Participation by Other Nations

The 17 nations listed in Table 2.5 are only part of a much more extensive group of nations and agencies that provide economic assistance to the developing world. The nations identified here constitute the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD). The OECD has 24 western-nation members that foster development in LDCs. In addition, several oil-exporting nations of OPEC provide assistance as do about 10 nations from the Socialist Bloc. For example, in one nation, Bangladesh, about 35 nations representing these three groups have economic assistance programs, along with 10 international (mostly multilateral) agencies. The size of the commitment to Bangladesh, both in number of nations and amount of assistance, is not typical of that found in most LDCs. It is common, however, for all LDCs to have several nations simultaneously extending economic assistance.

There are no obvious program specialties associated with particular donors or groups of nations. Most donors engage in assistance that is directed toward agricultural and rural needs, population planning, physical infrastructure development such as roads, communications, and irrigation structures, industrial development, and a wide variety of educational programs. Within these general areas, donors might choose a focus, but it is not uncommon for individual nations to have considerable diversity in their portfolio of assistance projects. Donors normally seek projects that fit their particular developmental philosophy, their perspective of development constraints within the LDC, or the availability of excess commodities or food. For example, much of Canada's assistance is food aid (wheat), while Sweden has chosen to emphasize training.

The tendency away from donor specialization makes coordination difficult for LDC officials. The difficulties are further heightened by the tendency of donors to pursue independent relationships with the host country. This may thwart close contact or collaborative planning among donors. Developing nations are forced to coordinate diverse, multiple-donor activities, which places stress on the capacities of both individuals and institutions within the government.

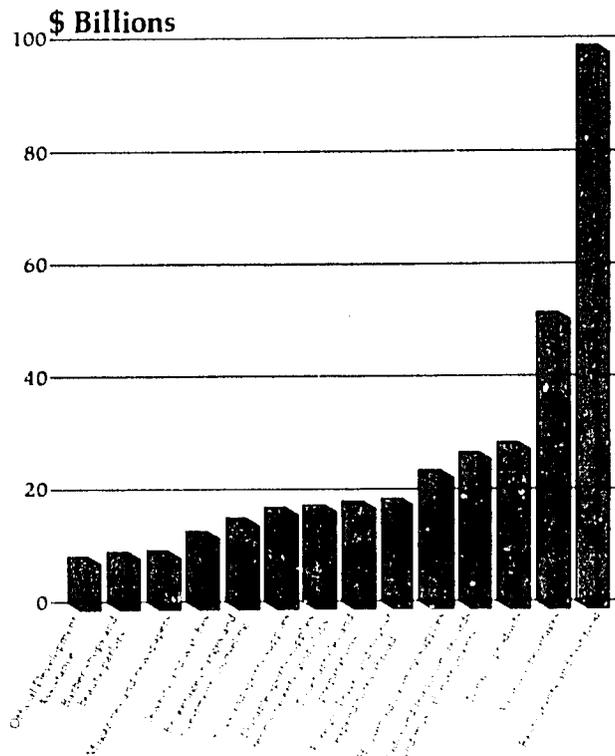
For most donor nations, issues of security and politics are not dramatized to the extent found with U.S. foreign assistance. Russia and some Socialist Bloc nations are the exceptions. Most OECD nations do not operate with a concept akin to security assistance. Mainly, they view their aid as developmental, and do not attach a strong political dimension to their efforts.

Benefits to U.S. Firms from Economic Assistance

There is an implicit assumption that the money provided by the United States for economic assistance constitutes an outflow of resources without benefit to the nation. In the next chapter, the international trade impacts of this assistance on the United States will be discussed. But in addition to trade relationships, more direct benefits accrue to U.S. business and industry from the expenditure of assistance dollars.

Figure 2.10

U.S. Development Assistance Compared with Personal Consumption Expenditures, 1983.



Sources: U.S. Department of Commerce Agency for International Development (A.I.D.)

A large portion of the support to LDCs is in dollars or U.S. credits spent for a wide variety of goods and services needed to implement development programs and projects. Machinery, supplies, and personal services are among the types of items normally purchased. Assistance agreements between the United States and LDCs specify that goods and services purchased for use on projects with U.S. funds must have their "source and origin" in the United States or be available for purchase from host-country manufacturers or suppliers. Only development assistance (and to some extent ESF) is included in this regulation. Multilateral aid is not regulated in this manner, but portions of the money are still spent in the United States.

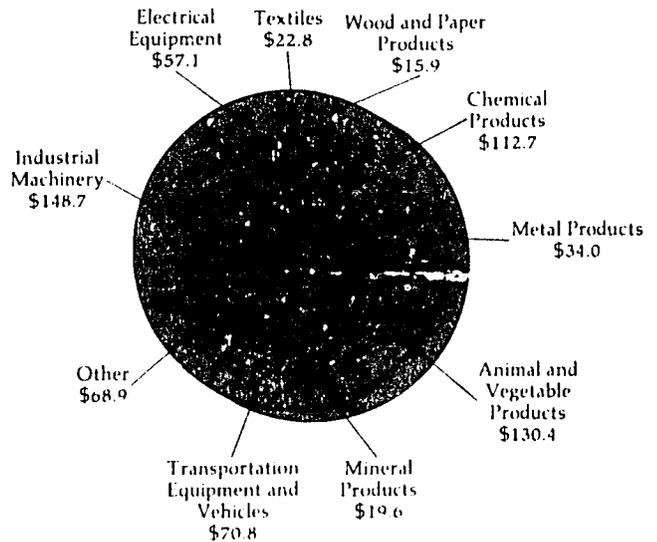
Estimates vary, but usually around 70 percent of these funds are ultimately spent on goods and services produced by U.S. suppliers. These expenditures are made in both the public and private sectors. In 1983, reports show that \$681 million was spent in the private sector (Figure 2.11). During the past 12 years, more than 5,000 U.S. manufacturers and suppliers received USAID-supported orders totaling more than \$9 billion.

This process is seen by some as a paradox in U.S. foreign assistance. On the one hand, it provides a realistic justification to Congress and the American taxpayer for use of U.S. resources abroad. On the

Figure 2.11

AID-Financed Purchases from the Private Sector.

Estimated \$ millions



Source: AID Highlights, Summer 1984, USAID.

other hand, it clouds the generosity associated with economic assistance by introducing a self-serving dimension that limits the independent rights of LDCs.

Both positions can have merit based on whether grant or loan funds are involved. If grant funds are being spent, it seems reasonable to attach conditions and expect them to be used for the purchase of U.S. goods and services. However, if a nation is using loan

funds, which it has a legal responsibility to repay, then its right to shop for the best deal may be more in order. The fact that loans are tendered at concessional interest rates may temper this position somewhat.

Before one condemns the U.S. policy too vigorously, it should be recognized that this nation's position is much less stringent than that of many other donor nations. For example, Japan and the Socialist nations place "source and origin" restrictions on all of their assistance. Most other donor nations, especially the larger ones with important industrial capacities, also impose similar types of restrictions on the use of their aid.

Implementation of U.S. Developmental Assistance

The administrative structure of USAID discussed earlier exists principally to fulfill the agency's programming and approval process for individual projects and national programs in LDCs. These procedures are extensive and require close collaboration and cooperation with the host nation. All projects proposed by USAID in a developing nation require the approval of that nation's government plus the concurrence of appropriate offices in Washington. It is not uncommon for three years to pass from the time a project is conceived within either the USAID mission or the host-country government and the time it finally receives congressional funding approval. (Appendix 2.8 gives a few of the key steps in the process.)

USAID's in-country staff does not participate directly in implementing specific projects. Aside from the tasks just mentioned, USAID project officers continually monitor projects to ensure progress and compliance with contract requirements. The agency makes extensive use of outside contractors. Project contractors are selected by the agency and the host country through a bidding process. Once Congress funds a project, USAID publicly announces the project for competitive bidding. Respondents generally come from the private sector, nonprofit development organizations, or the U.S. university system. Other U.S. governmental agencies with a needed expertise, such as USDA for example, can also be selected without the bidding procedure. The process has developed an extensive cadre of private firms interested solely in providing services in a wide range of development activities, from such diverse areas as engineering and construction to population planning.

The Role of U.S. Universities

The U.S. system of higher education has become a particularly important source of contractual help to U.S. developmental assistance programs. When the United States embarked on its initial Point 4 program in 1949, the U.S. university system was the first group to which the government turned for contracting assistance. By the end of 1952, eight universities had

been given responsibilities for agricultural and rural development programs in the following nations:

- (1) Iraq—University of Arizona
- (2) Panama—University of Arkansas
- (3) Philippines—Cornell University
- (4) India—University of Illinois
- (5) Colombia—Michigan State University
- (6) Ethiopia—Oklahoma State University
- (7) Brazil—Purdue University
- (8) Iran—Utah State University

This was a new experience for both the government and the universities. Few universities had previous experience operating either teaching or research programs in a foreign nation. That technical assistance activities were conducted far from the home campus added many complications. From that relationship has evolved a system that is becoming increasingly effective, though it still is not free of operational problems.

Involvement of the university system is critical to U.S. developmental efforts abroad since the system houses the greatest concentration of skilled scientific talent in the world. The land-grant universities have a special potential to help LDCs based on their role in promoting the rise of a highly productive agriculture in the United States and the agrarian nature of most developing nations. Clearly, if science and technology are at the base of developmental requirements in the developing world, the university has an important part to play.

The performance of universities has been mixed, but the experience since 1952 has revealed both benefits to the universities and problems in placing their faculty and expertise abroad. For the most part, the negative issues reflect on the incentive system associated with university commitments abroad. College deans and department heads have a primary responsibility to implement domestic research, teaching, and extension programs. The addition of foreign programs merely adds another dimension to existing programs. Faculty are usually assigned for at least two years on foreign projects, which means ongoing state programs are disrupted and faculty replacements must be found. A foreign program usually requests the most experienced and capable faculty members who probably are already an integral part of an urgent state program that is exerting much more immediate pressures on the university. Their withdrawal to serve abroad may bring strong objections from local producer groups who argue that their problems demand the faculty services more.

Individually, faculty members must assess the impact of their decisions on present research or teaching positions. Family relocation and adjustment also influence individual decisions. Family safety, health, education, and disruption of existing social relationships with school, church, and extended family are all important to an agreement to go overseas.

Consider, too, that on a 10-year contract requiring the university to assign faculty to fill positions for five separate agricultural specialists, if each specialist rotates each two years, 20 faculty will be needed to fulfill the entire contract. If the program is in a non-English speaking nation, the need for language training presents an added difficulty. The composite of university and faculty issues, the number of faculty needed, plus the timing of contract and university needs often mean that technical people cannot be delivered abroad on time, and too often qualified replacements for each position are difficult to provide over the full life of the contract.

The issues are complicated and their resolution difficult, but the need for university faculty is critical, so much so that university and USAID officials have spent much time establishing a functional relationship, especially in recent years. In 1975, Congress enacted Title XII to the Foreign Assistance Act of 1961, a move designed to enlist fuller and more effective use of the university system in developmental assistance. Title XII helps strengthen foreign-program capabilities in agricultural universities and colleges.

About 50 U.S. universities now participate under this strengthening program. Authority under Title XII is exercised through USAID, assisted by a seven-member, presidentially appointed Board for International Food and Agricultural Development (BIFAD). This more recent emphasis on university/USAID collaboration is helping to make more qualified faculty available for developmental programs abroad.

In 1984, about 120 USAID-funded Title XII projects were being implemented by U.S. universities worldwide. During 1983, the universities completed 61 such projects, most of which had been in progress for several years. Typically, the duration of these projects is from 2 to 10 years.

Benefits to the University

Despite the difficulties, the university system places hundreds of faculty abroad annually (many with private firms) to assist the U.S. development effort. Here, too, the experience of the past 35 years has demonstrated advantages to the state and university alike

The first is the obvious impact on the quality of education. Faculty with foreign experience bring new perspectives to their classes, improve departmental curriculum, stimulate student awareness of world conditions, and help improve university/community relationships.

Second, overseas commitment by a university brings more foreign students to the campus, which adds a cultural dimension to the university and surrounding community.

Third, the interchanges of knowledge between the university and the host country can create a reverse flow of technical information and commercial opportunity. For example, few of the agricultural crops in

the United States are indigenous. While most were here before 1949, important improvements have occurred since as a result of reverse technology flows from LDCs.

Finally, there is an economic benefit to each state. Faculty salaries abroad, transportation and shipping, supplies, and equipment are just a few of the contract costs purchased with USAID funding. A big share of this money is spent within the state to assist economic activity. Universities also receive payments for indirect costs associated with the contracts. In addition, the international students spend important amounts of money on goods and services within the state while pursuing their education.

Summary Comments

Clearly, the United States has an extensive capacity for assisting with development needs abroad and a high level of willingness to do so. The historical evidence is impressive, especially in terms of total assistance and despite some softening of "real" support in recent years. Part of the effort has been clouded by the introduction of politically motivated security assistance, which has not always proved successful. In retrospect, for example, security assistance to Iran and Vietnam did not produce the desired long-term results. Much of the criticism leveled against development assistance is likely the outgrowth of confusion with security assistance. Because of this intermingling of all economic assistance, the American public has not always been able to separate purely developmental efforts from those that are highly politicized and more controversial.

The issues inherent in the intermingling of development and political objectives point to a fundamental philosophy of foreign assistance that is continually debated: Should U.S. assistance designed to assist the world's poor be separated from security assistance and other types of noneconomic aid, regardless of the economic assistance nature of the latter?

A related concern to the American people, whose taxes support developmental efforts abroad, is whether past and present aid has been effectively used. Is reasonable progress being made?

From the data presented in the discussion of the world food problem, it is apparent that the problem is a severe one, with exceedingly complicated issues to be confronted. Yet since 1970, food output in LDCs has risen so that minimal improvements in per capita welfare have been achieved. Certainly, this progress would not have been possible without assistance from donor nations. In addition, a base has been established that should make future assistance even more productive. More is known about the developmental process now and nations have acquired added experience. Part of a learning phase has passed and, as distressing as the problem of world hunger is today, it could be much worse. The world is better off now than it might otherwise have been had the needs of poor nations been ignored these past 35 years.

Both successes and failures can be found in individual projects and national programs. Mistakes have been made and projects have failed or been less effective than they should have been. Poor project planning and implementation are apparent; developing nations have not always met their obligations in terms of cooperation and national policies to foment development; domestic politics have not always been stable and administrative procedures have, on occasion, permitted graft and power influence to limit efficiency; changes in support and programming focus have occurred as U.S. political interests have varied; and population has continued its relentless march. In far too many developing nations, domestic political problems, national security issues, and industrial development strategies have attracted much more attention than relieving the poor and investing in agriculture and people. Drought in large parts of Africa and periodic flooding in other parts of the world, such as Bangladesh, have complicated the picture even more by creating truly abnormal natural conditions that defy immediate solution. The developmental process being faced now is highly dynamic, involving all gradients of natural, social, political, and cultural variation across some 70 widely diverse nations. Even under ideal conditions it represents a Herculean task.

But perhaps the greatest error to date in U.S. development assistance efforts has been impatience. As Americans, we have come to expect too much too fast. Development is a complicated process, and processes often require extensive gestation periods. Yet those in Congress who approve development budgets and those who pay taxes continually ask for success stories to shore up support. It is not unreasonable to ask for accountability and demonstrated progress for USAID efforts. But if the system places too much pressure for immediate success, it can lead to decisions too often aimed at answering the demands of program critics back home at the expense of programs that might provide a longer-run solution to the issues faced in developing nations. Abandoning a shorter-run perspective in development programming often requires acts of faith, as the passage of time (often long periods) is a crucial ingredient before program outcomes can be known.

More Still Remains

Beyond our impatience, our ill-advised demands for early successes, and even our prior lack of appreciation for the complexity of the issues of world hunger, public apathy still stands as a vital deterrent to future success. As already suggested, the historical response of the United States cannot honestly be faulted despite a softening of "real" support over the years. Clearly, the American public has supported efforts to alleviate suffering and privation resulting from emergency shortfalls of food as has occurred in Ethiopia.

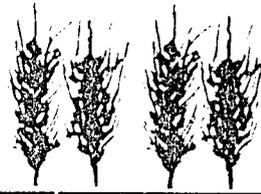
The level of willingness and goodwill in America runs high and the response both as individuals and as a government justifies applause.

What is not so clear, however, is that Americans truly understand that extreme starvation in Ethiopia or Sudan or Bangladesh, despite the loathsome conditions, is not the world food problem. These emergencies, which spring to the sensational coverage of television and burn the sensibility of men, are not the essence of the problem being faced. They are only an extreme expression of food shortfalls. The world problem is the incidious and continual march of malnutrition and deprivation created by the incapacity of masses of people to either produce food or earn money to buy it for their families. It is not clear that Americans understand the long and arduous task that must be attempted and the concomitant support that must accompany the effort.

The historical absence of a strong public alliance with official foreign developmental assistance indicates an attitude that has shunned the longer-term need. Americans react to stark hunger and starvation when it is publicized, but tend to lose interest and ignore the problem when the less visible forces are all that remain.

There have been no national movements protesting the erroneous development policies in a poor nation or even heavy lobbying in Congress to express a popular concern. For example, U.S. citizens have taken to the streets to protest apartheid in South Africa. Yet no citizen group has pressed the issue of inadequate developmental policies in Ethiopia or elsewhere that sentence large numbers of people to starvation and death. Is one issue really substantially different from the other? Is not the right to feed and clothe one's family as basic as any civil or human right conceived by man? Does it not deserve the same attention and sponsorship by the American people as they have given to other social and moral issues, both domestically and abroad?

With hundreds of millions of people still shackled by poverty and hunger, there should be no thought of turning aside from the challenge ahead. There are no physical or natural reasons why the world's population cannot be adequately fed. The world's hunger problems are man-made and so too will be their solutions. The answers are more a matter of public and popular commitment than of technological deficiencies. Future efforts will find ups and downs, but the trend will be forward. The payoff is too important. The effort must be made.



Chapter 3

U.S. ECONOMIC ASSISTANCE AND INTERNATIONAL TRADE

by E. Boyd Wennergren

The average standard of living in the United States ranks among the highest in the world and this country's long-run productive capacity is unmatched in the community of nations.

This material wealth could not be maintained if the United States chose to isolate itself and not engage in a wide range of international trade activities. Exchange among nations can be a controversial topic, but it has been demonstrated time and again that the welfare of nations is consistently improved by such interchanges. By its very nature, trade benefits all partners. This is fortunate since no nation can be completely self-sufficient in providing all of its needs.

Economic Development and Trade

Participation by an LDC as an active trading partner is an important signal in the process of economic development. Such progress reflects gains by a nation in moving through the stages of economic evolution. When this occurs, several important steps have been successfully taken.

Present development thought suggests that the process begins with rising agricultural productivity and that meaningful increases are not likely to be produced by expanding traditional resource use. New technologies are needed in agriculture so that output can be expanded and farm profitability improved. Research and extension are at the base of this change, which, once set in motion, creates a chain of reactions throughout the economy. The adjustments are not all automatic as evidenced by the recurrent economic problems confronting nations. But progress can and does occur if proper public policies and investment and other economic factors are in place and attended to.

Simply stated, the series of changes proceeds in the following way:

First, as agricultural production rises and becomes more efficient, it allows the agricultural sector to release part of its labor force to industrial employment while still meeting the food needs of the nation.

Second, as agricultural output increases, net farm incomes also rise, thus creating new levels of rural purchasing power and demand for additional industrial goods as well as a surplus of income over consumption that can be mobilized as savings to be invested in either industrial or further agricultural modernization.

Third, as food output improves, relative food prices fall so that consumers in the nonagricultural sector (as well as those in agriculture itself) are able to purchase food at a lower price. In essence, this creates a transfer of wealth from the agricultural sector to other consumers whereby money previously spent on food is now available to buy even greater amounts of food (thus improving nutrition) or for nonfood purchases. Since people with low incomes tend to use a large part of their income on food, declining food prices brought by improved agricultural production can have a significant impact on the welfare of these families.

If trade with other nations was not practical, the impact of the process could stop here. But since trade is possible, the linkages associated with rising output in agriculture are extended further. Initially, as agricultural output continues to improve, its efficiency also improves as unit production costs decline and agriculture is made more competitive in world trade. As a consequence, new classes of agricultural output now become important exports for a developing nation. Concomitantly, industrial production can also become more efficient and competitive as labor and investment resources previously transferred from agriculture are better employed. The result is an improved export base and an expanded capacity to pay for imports.

Second, as this process evolves, both agriculture and industry require added amounts of modern machines, equipment, and raw materials, most of which must be imported. Thus, the major impacts of development among LDCs begin to be expressed in world markets, and these needs are met by trading partners. Depending on the pace of development, the demand for such goods by LDCs can become significant.

Third, the import needs for food and other consumables in LDCs also rise as consumer incomes improve in the face of development progress. As a society becomes more affluent, its demand for quality and variety of a wider range of products and services increases. Where domestic production is inadequate, the requirements for goods from abroad rise, often dramatically. To some extent, this demand for new items can foster new local production depending on the capacity of producers to meet world competition. But it is apparent that most LDCs cannot meet all of the new domestic demand for both consumer and

industrial products. Their developmental progress and emergence as trading partners, thus, has important linkages to developed nations that are positioned to fill the rising LDC demand for imports.

Much of the future for developing nations depends on these trade relationships. Imports are vital if these nations are to develop. Such strategic imports as fertilizer, petroleum, irrigation equipment, and classes of raw materials to support existing (but usually limited) industrial plants are basic to developmental progress. In addition, consumer goods demanded by emerging middle- and upper-income families add to the economic pressures from imports. To pay for these items, exports must be found to provide international exchange. Even in poorer nations where food production is a major concern, export needs cannot be ignored if a viable trade system is to support their economic progress.

For developed nations, trade is equally important. Pressures from imports are more severe than in developing nations, mainly owing to the strong domestic demand for foreign goods and services. Raw materials are also important since critical metals and minerals are often unavailable domestically or may be less expensive if procured from another nation. Most developed nations find themselves dependent on other nations (many of which are LDCs) to provide materials strategic to their nations' needs. Like LDCs, developed nations must export amounts comparable to their imports or suffer the economic damages to their economy that accompany negative trade balances. The trade and market potentials of developing nations are a material part of the economic structure facing developed nations. Even at initial stages of development, LDCs must engage in trade. But the potentials expand significantly as development progresses and then likely benefits offer an important rationale for the economic support presently provided by richer nations to the developing regions of the world. One estimate of the importance of LDC economic growth to U.S. exports and the economy has been provided by the United Nations Development Program. According to its estimate, 500,000 new jobs would have been created in the United States if the economic growth rates for LDCs found in the 1970s had not slowed in more recent years. In other words, a slowing of LDC progress has had a detrimental effect on U.S. exports and job creation.

Principle of Comparative Advantage

For all nations, the process of international trade sharpens the efficiency of their productive capability since they must compete in the production of similar products. The pressure of this competition usually leads to discoveries of the "best" and "most profitable" ways to produce. The process can also help a nation decide which products to import and which ones to produce at home.

It is a common notion that a nation should export goods it can produce at an absolutely lower real cost at home and import goods for which other nations have a similar advantage. This view is based on the concept of an "absolute" advantage in production. Often it is best, however, for a nation to import rather than produce even an item for which it has an absolute advantage. By so doing it can concentrate its domestic production on only those goods where it has the highest possible advantage.

To illustrate the point, suppose a businessman is expert both in managing his business and doing secretarial work. In other words, he has an absolute advantage over a secretary for typing and related jobs. Why does he hire a secretary to perform these duties? Because even though he can do both tasks better than someone else, it is more efficient and productive for him to concentrate his limited time where it yields the greatest income relative to other options and to "buy" the services of a secretary to do the lower-paid work. The same logic applies to nations. Even though the United States may be more efficient than Japan in producing both wheat and television sets, it still may make economic sense for the United States to concentrate on producing wheat, if it provides the highest returns relative to television sets, and exchange part of what is produced for television sets.

This is called the "law of comparative advantage." Today, world trade is governed by comparative and not by absolute advantage.

Simply stated, a nation's comparative advantage is determined by four general factors, all of which affect the cost per unit of output for domestic products: (1) its natural resource base, (2) its location relative to markets, (3) its production efficiency as measured by the ratio of inputs to outputs, and (4) its trade policy as expressed in such items as import or export tariffs and currency exchange rates. The nation's natural resources and location are mainly fixed and more difficult to manipulate for economic gain. However, the ingenuity of man can exercise a significant impact, especially on the other two factors.

As a consequence, the concept of comparative advantage has very important implications for nations involved in international trade. It means that nations are not necessarily restricted to exporting only goods they produce best. In fact, they should produce goods they are relatively good at producing and allow other nations to do likewise. By so doing, all nations benefit, and all nations, be they developed or developing, can identify some type of good or mix of goods to produce for export.

U.S. Trade Experience

The record of the past 35 years confirms the mutual benefits that both developed nations and LDCs derive from trade relationships. It also demonstrates that the economic development of LDCs can create active and

beneficial trade partners whose presence complements those of other nations. Certainly, this has been the case for the United States. As a nation, we operate within a world community that supplies critical imports and serves as a market for our exports. LDCs are an important subset of this group.

Classes of Imports

There are two broad classes of imports and each has a different implication for groups within the United States. The first involves goods that "complement" the national resource and skill base related to U.S. production. A significant number of natural resources essential to U.S. industry and commerce are either not produced in sufficient quantity domestically or simply are not available in the United States. Developing nations are often the principal suppliers of these key commodities.

The second group of imports competes with products made in the United States. These imports are much more controversial since a decision to bring them into the country may result in displacement of U.S. production, and hence U.S. jobs.

Complementary Imports. The United States is highly dependent on other nations for several complementary imports, (Appendix Table 3.1). For example, in 1980, 100 percent of strontium, 97 percent of tin, 82 percent of bauxite, and 41 percent of petroleum products consumed in the United States were imported, and most came from developing nations. Also 100 percent of natural rubber imports came from LDCs. These and other kinds of materials are critical to the U.S. industrial base and their uninterrupted availability is a persistent concern.

Agricultural crops constitute a second major source of complementary imports. Most are tropical fruits and vegetables. Their production often coincides with special climatic conditions in various nations that enhance their comparative advantage. Such crops as coffee, cocoa, bananas, coconuts, and several classes of spices are examples of agricultural products not produced in the United States but imported as complementary items for domestic consumption.

Typically, LDCs that trade with the United States have a limited export base, which depends heavily on these primary metals, minerals, and agricultural commodities (Appendix Table 3.2). It is common for one or two crops to account for more than 50 percent of exports from LDCs. For example, Lesotho obtains 90 percent of its exports from wool, Burundi 94 percent from coffee, and Namibia 92 percent from three primary metals. Generally, the value of these single-product exports is not adequate to carry the full burden of the nation's foreign trade, and negative

trade balances are common. (In 1982, the composite deficit for all LDCs was \$118 billion. See Chapter 2).

Overall world trade relies heavily on these primary commodity exports from developing nations. For the most part, they are staple food items or critical minerals or metals. Among the more important commodities, more than 90 percent of coffee, rubber, and cocoa are supplied by LDCs. (Appendix Table 3.3). Petroleum, tin, and tea are also supplied largely from developing nations.

This tendency toward specialization reflects the law of comparative advantage as influenced mostly by natural resource conditions that favor the production of one or two products. Either the minerals and metals are in place as decreed by nature, or the crops are especially fitted to local climates and have become stable over a long period of adaptation. In the absence of somewhat recent developmental progress in the nation, a broader production or export base generally is not in place.

The high dependence on primary commodity exports carries extreme risks for LDCs. Prices of primary commodities tend to be highly variable and LDCs often find the export value of their products suffers from declining prices. Also, primary products are very vulnerable to technological changes that give major

cost advantages to substitute commodities. A good example is the competition from synthetic materials that have displaced wool, cotton, and other natural fibers in textile manufacturing.

Finally, agricultural crops originating in the tropics (as do most from LDCs) have a special susceptibility to damage from disease and insects. The sudden decline of cocoa production in Ecuador and the destruction of banana production throughout much of Central America from Panama Disease in the 1950s are just two examples of the widespread havoc that can suddenly eliminate or materially reduce a large portion of the export base for these nations. Lack of diversity in agricultural production is a major danger in most LDCs, not only because it limits export flexibility, but also because it reduces domestic consumption options. In the latter case, nutrition suffers and the national diet is commonly deficient in essential vitamins and minerals.

If these nations are to diversify their production and exports, markets for their products are essential. LDCs face a difficult task as they attempt to enter the highly competitive world of international commerce. In large measure, the most available markets are located in developing nations. Development in LDCs is conditioned by the degree to which these markets can be secured.

As will be discussed in the next section, the impact is quite different and the issues much more controversial when imports from LDCs compete with U.S. products. These concerns often lead to protectionist policies whereby tariffs or other regulations limit entry of foreign goods into U.S. markets. The export market needs of LDCs, however, constitute another dilemma in the application of U.S. economic assistance abroad.

The success of U.S. assistance to LDCs may be determined in some important part by the degree to which portions of selected kinds of increased production can be marketed both in the United States and other donor nations. This is the essence of the North-South dialogue (to be discussed in Chapter 4) in which developing nations are calling for a restructuring of the world's economic order. One of their requests is for better access to markets found in the developed world. The issues are complex and must be dealt with if the problems of world hunger and economic development are to be properly addressed.

To help stabilize prices of agricultural commodities traded by LDCs and to provide for more orderly marketing, the United States participates in a noncompetitive quota system for selected products. The most important crops included under noncompetitive procurement by the United States are coffee, sugar, rubber, cocoa, and some types of spices. In 1984, all noncompetitive imports, mostly from LDCs, accounted for 35 percent of U.S. farm imports.

Competitive Imports. Classes of imports that compete with U.S. products are most commonly manufactured goods that come from other developed nations

or the more advanced LDCs. However, several classes of agricultural exports from LDCs are competitive with U.S. agriculture. Important among these are beef, swine, dairy, poultry, and certain kinds of fruits, vegetables, and oilseed products.

Since competitive imports create a controversial policy issue, it will be useful to discuss the reasons why imports generally, and even the competitive ones, can benefit both the United States and its LDC neighbors.

A first-level benefit from imports arises from their interrelationship with exports. When the United States imports commodities, the process provides foreign exchange to other nations, which in turn finances their purchases of U.S. exports. As will be demonstrated in the next section, the United States realized a slightly positive trade balance for most years from its trade relationships with LDCs. Had the United States not permitted competitive imports to enter its domestic markets, jobs and production would have been protected in import-related areas. But such a policy would surely have set into motion a chain of reactions that would have limited export sales and foreign exchange earnings in LDCs and, consequently, jobs in export-related production would have suffered. The trade-offs may not be one for one, but they do exist.

A second benefit from importing relates to this same issue and is based on the principle of comparative advantage. It makes no sense for the United States to produce everything it can when it can obtain things at less cost through trade arrangements. Yet this policy will from time to time have an impact on existing industries and require adjustments in resource use and production, especially where competitive imports are involved. Some see these impacts as negative, and they are in the sense that they cause stress for people. But they can also be positive if they sharpen the discipline of producers and encourage them to use the situation to redirect resources into more productive uses. This takes time, and sometimes the adjustments to people's lives can be severe until a new structure is achieved. But this is the nature of competitive trade relationships.

In the long run, the United States must maintain an efficient and competitive economy if the nation is to continue its prosperity. Failure to meet these issues head-on and adjust to them continually permits problems to become masked in import restrictions. With trade protection, domestic producers can ignore the need to create more efficient, lower-cost plants as well as the possibility of losing markets to more efficient foreign producers.

To help ease this kind of domestic transition on industry and people, the U.S. government has enacted trade assistance legislation. But in all fairness, the rules of the game with respect to protectionism must be reasonably consistent among all nations if the best effects of open trade are to be realized among trading partners. For example, LDCs cannot protect their

producers in the long run with tariff regulations and expect developed nations to insist that their producers compete unprotected. These kinds of issues are constantly at the forefront of trade discussions among nations.

A final benefit from competitive imports is the price advantage that results for domestic consumers. Imported goods increase the quantity and variety of available goods and create market pressures that tend to reduce consumer prices. Savings to U.S. consumers from purchasing less expensive imports have been significant. This option is especially important to low-income Americans. Also, these savings are not lost to the economy since they can be redirected to savings or the purchase of other domestically produced goods.

The cost of allowing competitive imports to enter the United States is a widely discussed and highly visible topic. People leaving jobs and industries being challenged or closed are newsworthy events. But the underlying benefits, both in the long and short run, and the intricacies of competing in world markets should be understood before judgments are passed.



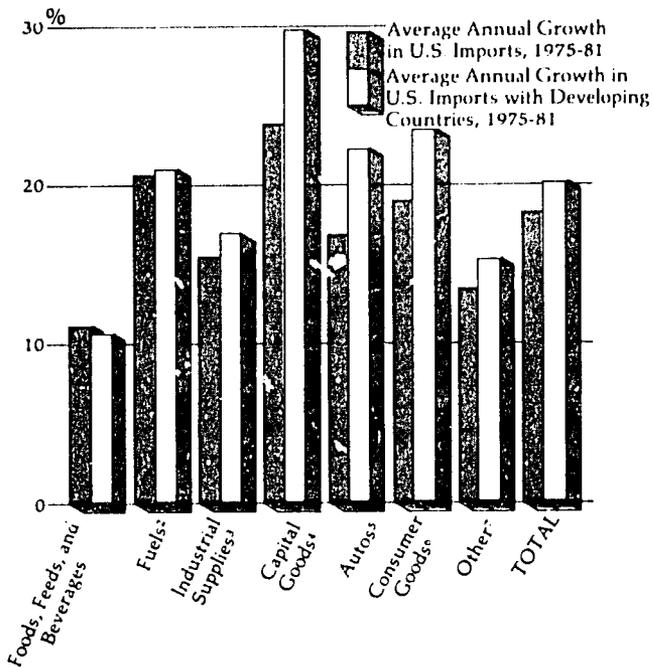
Composition of U.S. Imports

Total U.S. imports have grown steadily and substantially since 1975. In that year, they stood at \$96.1 billion, but grew 18 percent annually to \$261.3 billion in 1981 (Figure 3.1). The share of imports coming from LDCs rose for the period from 42 to 46 percent, an annual change of about 20 percent. The highest percentage of imports in 1981 from LDCs was for fuel

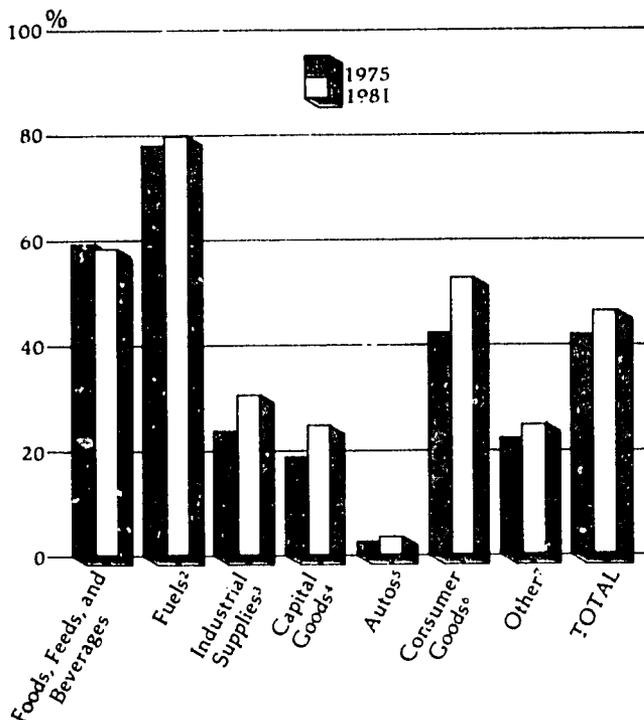
(mostly petroleum) and food items. Despite the high percentage of food items coming from LDCs, their dollar value was one of the lowest among all classes of imports. The import shares for food and fuel have remained fairly constant since 1975. The fastest growth, both in market share and annual growth, has been in capital goods and consumer goods.

Figure 3.1

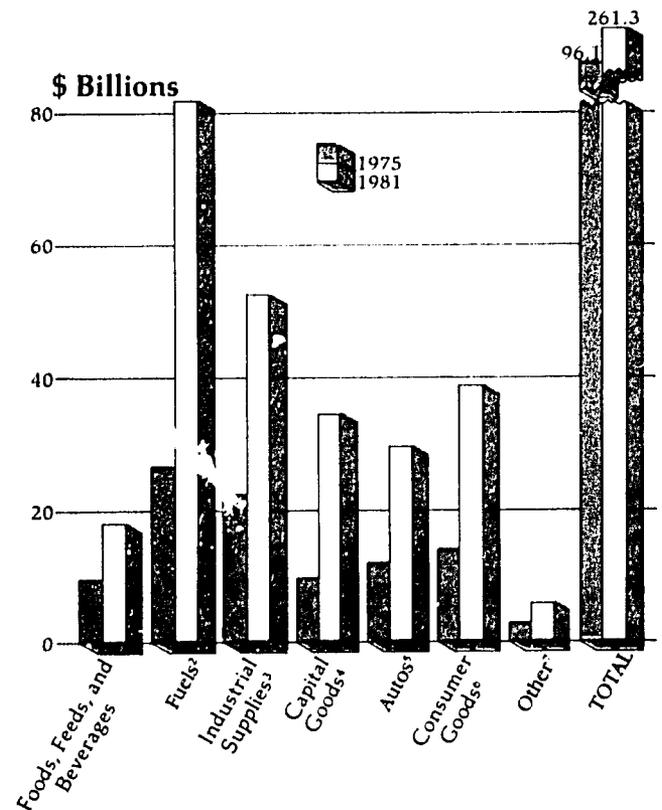
Growth of U.S. Imports in Total and from Developing Countries.¹



Developing Countries' Share of U.S. Imports.¹



Total U.S. Imports.¹



¹Includes centrally planned developing economies.

²Includes coal and related fuels, petroleum and petroleum products and natural gas.

³Includes (inter alia) cotton, agricultural materials for industry, iron and steel, primary metals, lumber, chemicals, textiles, leather, and glass.

⁴Includes (inter alia) electrical industrial equipment, nonelectrical industrial machinery, tractors, electronic computers, scientific instruments, aircraft and railway equipment.

⁵Includes cars, trucks, buses, special purpose vehicles, engines, and parts.

⁶Includes (inter alia) electric household appliances, radios, televisions, phonographs, clocks and watches, sporting equipment, apparel and other nondurables.

⁷Includes (inter alia) military type goods and miscellaneous items.

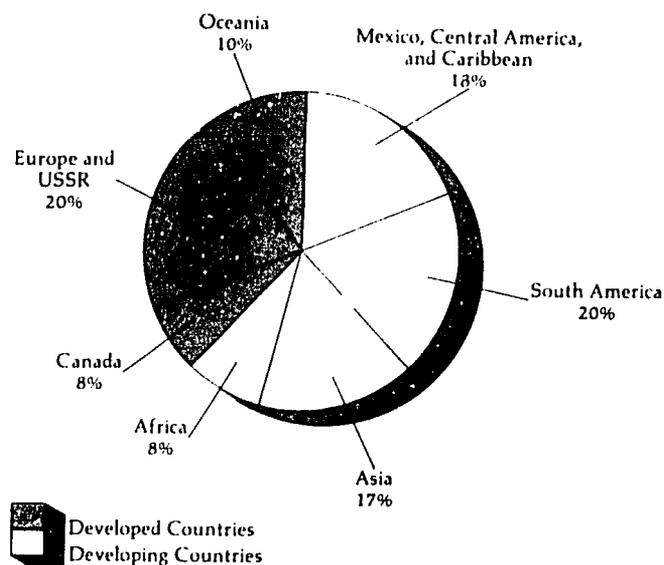
Notes: Imports are f.a.s. (free alongside ship) transaction values.

Sources: ODC table based on U.S. ODC highlights of U.S. Trade (Dec. 1975) and (Dec. 1981) table E-7 and I-12. Reproduced here from ODC, Agenda, 1983.

About 35 percent of all U.S. agricultural imports are classified as noncompetitive; the rest are competitive. In most years, about 60 percent of all agricultural imports (both competitive and complementary) come from LDCs (Figure 3.2). The developing nations most involved in shipping agricultural products to the United States are Indonesia, Colombia, the Philippines, Malaysia, the Ivory Coast, Ecuador, Guatemala, Argentina, Honduras, and El Salvador.

Figure 3.2

Sources of U.S. Agriculture Imports.

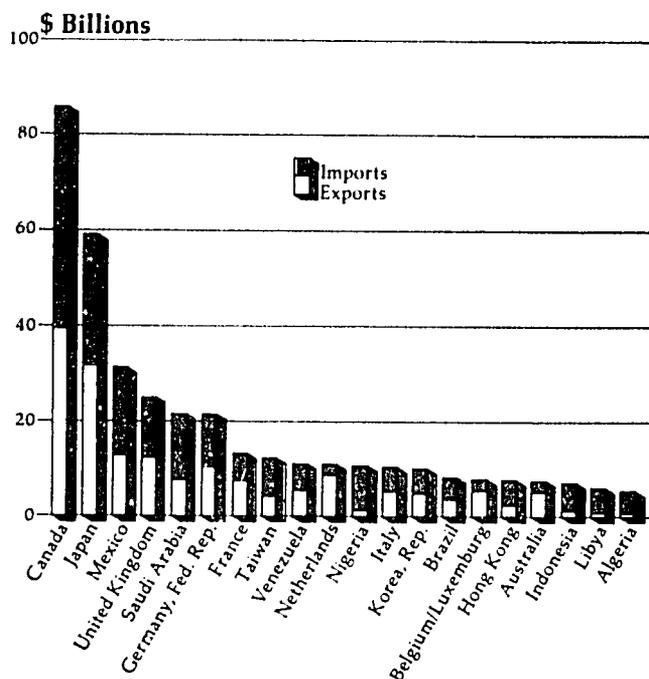


Source: USDA, 1982. Reproduced here from "Michigan Agriculture and Its Linkages To Developing Nations," Michigan State University, 1984.

It should be kept in mind that many nations classified as LDCs in these tables are, in fact, emerging nations that are creating an important industrial production and export base. Among the 20 largest U.S. trading partners in 1981, 11 were classified as LDCs and they captured 31.5 percent of total U.S. imports (Figure 3.3 and Appendix Table 3.4). Mexico, Saudi Arabia, Taiwan, and Venezuela were the four most important importers among LDCs, but all are upper middle-income LDCs. Only Nigeria and Indonesia are classified as lower-income nations among those found in the top 20. It is noteworthy that most of these 11 LDCs formerly benefited from U.S. assistance. Their importance as trading partners illustrates the interrelationship of development and trade discussed in the first part of this chapter.

Figure 3.3

Twenty Largest U.S. Trading Partners.



Note: All figures are f.a.s. (free alongside ship) transaction values.
 Source: ODC table based on U.S. DOC Highlights of U.S. Trade (Dec. 1981), tables E-3 and I-6. Reproduced here from ODC, Agenda, 1983.

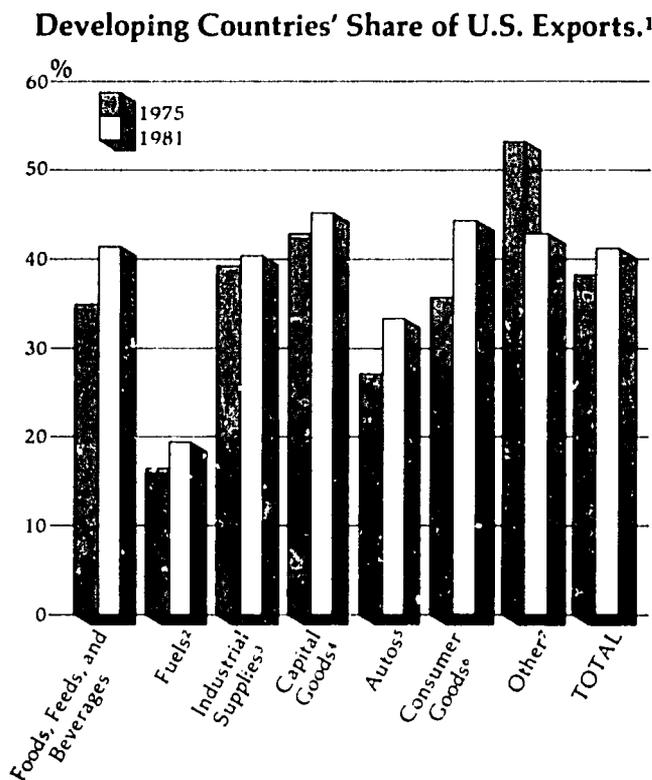
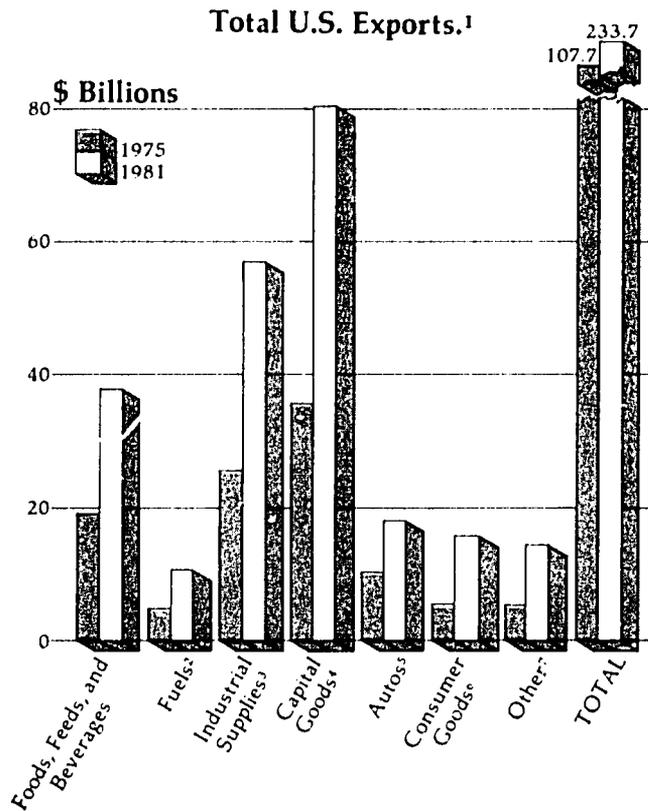
U.S. Export Trade

Exports are the lifeblood of the U.S. economy. Despite its large domestic market, which consumes much of the nation's production, the United States needs sales abroad to earn foreign exchange to pay for the high level of imports demanded by U.S. citizens.

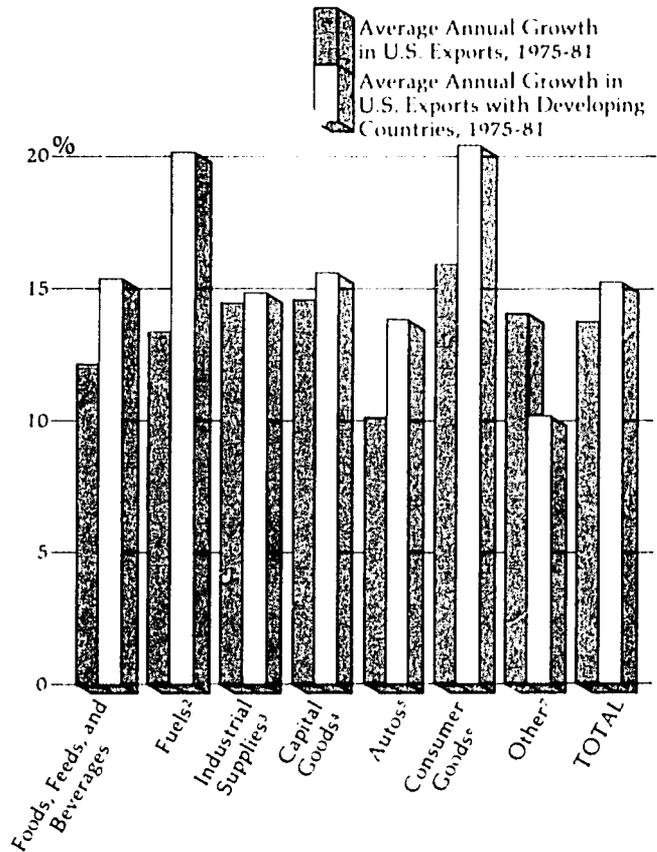
The export success of the United States is closely tied to its relationship with developing nations. Of the

\$108 billion exported in 1975, about 38 percent went to LDCs (Figure 3.6). Developing nations' imports from the United States rose to 41 percent in 1981 as total U.S. exports more than doubled. With the exception of fuels and autos, developing nations received between 40 percent and 45 percent of all other types of U.S. exports.

Figure 3.4



Growth of U.S. Exports in Total and to Developing Countries¹



¹Includes centrally planned developing economies.

²Includes coal and related fuels, petroleum and petroleum products and natural gas.

³Includes (inter alia) cotton, agricultural materials for industry, iron and steel, primary metals, lumber, chemicals, textiles, leather, and glass.

⁴Includes (inter alia) electrical industrial equipment, nonelectrical industrial machinery, tractors, electronic computers, scientific instruments, aircraft and railway equipment.

⁵Includes cars, trucks, buses, special purpose vehicles, engines, and parts.

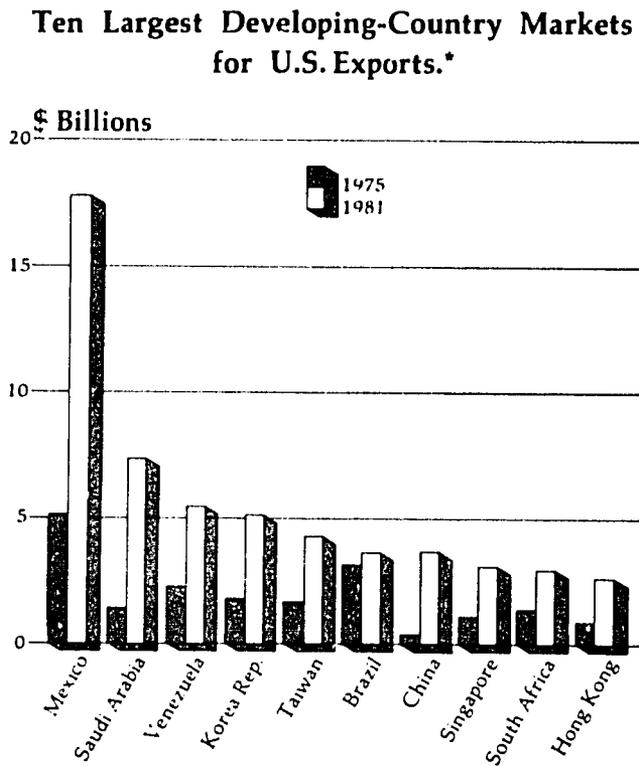
⁶Includes (inter alia) electric household appliances, radios, televisions, phonographs, clocks and watches, sporting equipment, apparel and other nondurables.

⁷Includes (inter alia) military type goods and miscellaneous items.

Notes: Exports are f.a.s. (free alongside ship) transaction values.

Sources: ODC table based on U.S. DOC highlights of U.S. Trade (Dec. 1975) and (Dec. 1981) table E-7 and I-12. Reproduced here from ODC, Agenda, 1983.

Figure 3.5



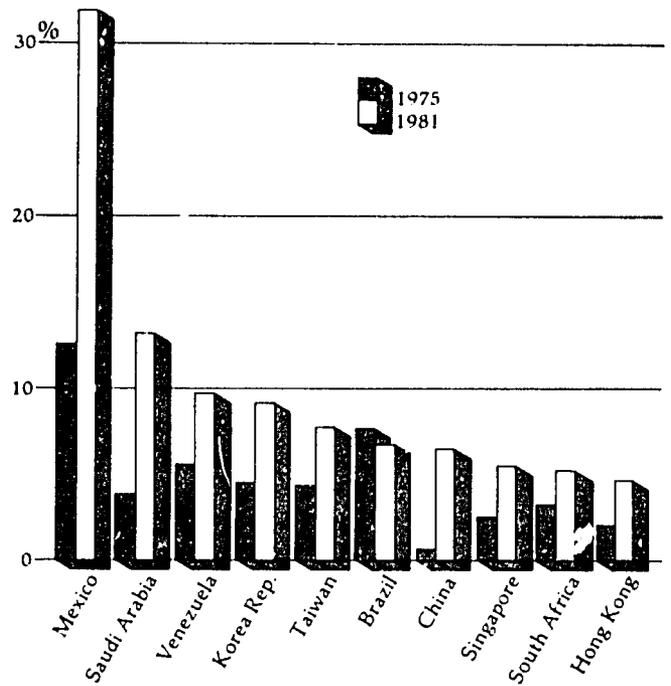
*Compound annual rates of change.

The annual growth in exports to LDCs for 1975-1981 was 15.2 percent, slightly faster than the rise in all exports. Fuels and consumer goods had the highest growth rates.

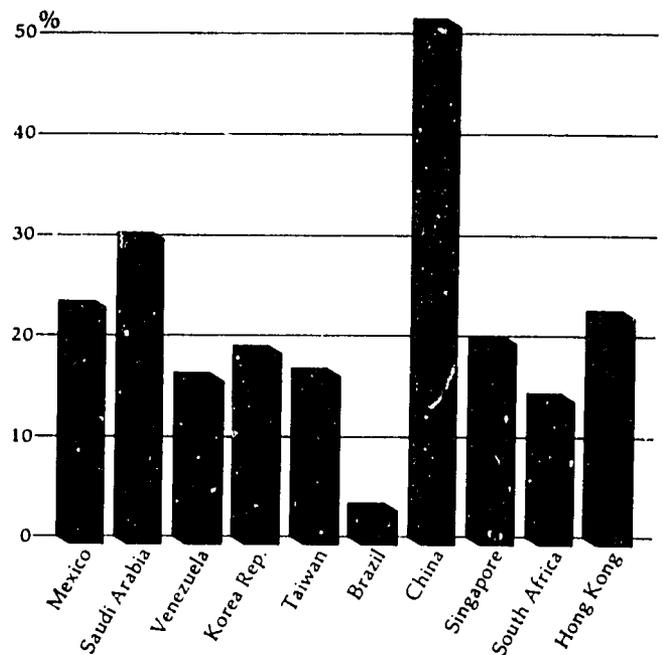
Most of the same nations that are important to U.S. import trade are also among the more significant export markets. This only supports the prior claim of mutual advantage from trade relationships (Figure 3.3). In 1981, Mexico purchased about \$18 billion from the United States, or about 32 percent of all U.S. sales to LDCs, to head the list of LDC markets (Figure 3.5 and Appendix Table 3.5). Saudi Arabia was the second most important. Overall, the 10 largest LDC traders accounted for 56 percent of all U.S. exports to developing nations.

From 1975-1981, China was the fastest-growing LDC export market. The annual increase to China was 51 percent as shipments rose from \$0.3 billion to \$3.6 billion. Saudi Arabia increased its purchases by 30.2 percent annually and Singapore by 20 percent. It is significant, however, that the largest LDC markets for U.S. exports are the upper-income developing nations.

Share of U.S. Exports to Developing Countries.



Average Annual Growth in U.S. Exports, 1975-81.*



Notes: Countries are ranked according to 1981 percentage share of U.S. exports to developing countries. Data include developing centrally planned economies. Total U.S. export figures include trade with unidentified countries. All figures are f.a.s. (free alongside ship) transaction values.

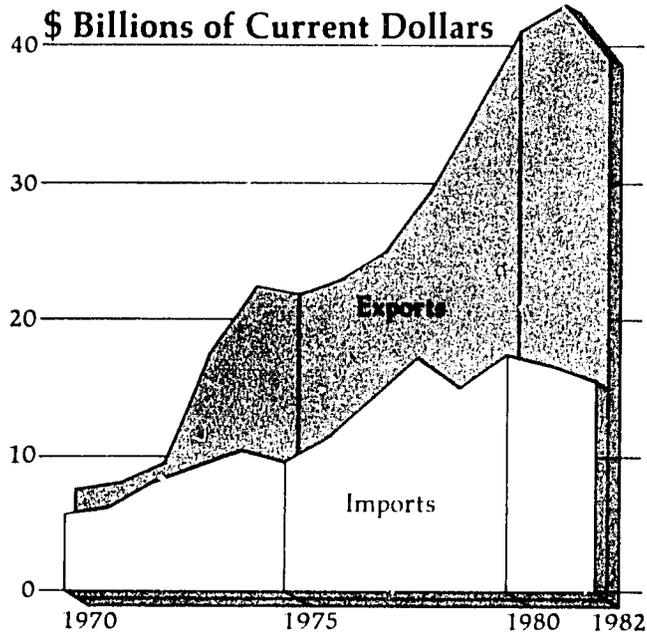
Source: ODC table based on U.S. DOC, Highlights of U.S. Trade (Dec. 1975). Table E-3; and (Dec. 1981). Table E-3. Reproduced here from ODC, Agenda, 1983.

Agriculture's Role

Agriculture plays an increasingly important role in U.S. exports. In 1970, agricultural exports approximated \$7 billion and rose consistently to a peak of about \$43 billion by 1981 (Figure 3.6). They fell slightly in 1982. During the same period, U.S. imports

Figure 3.6

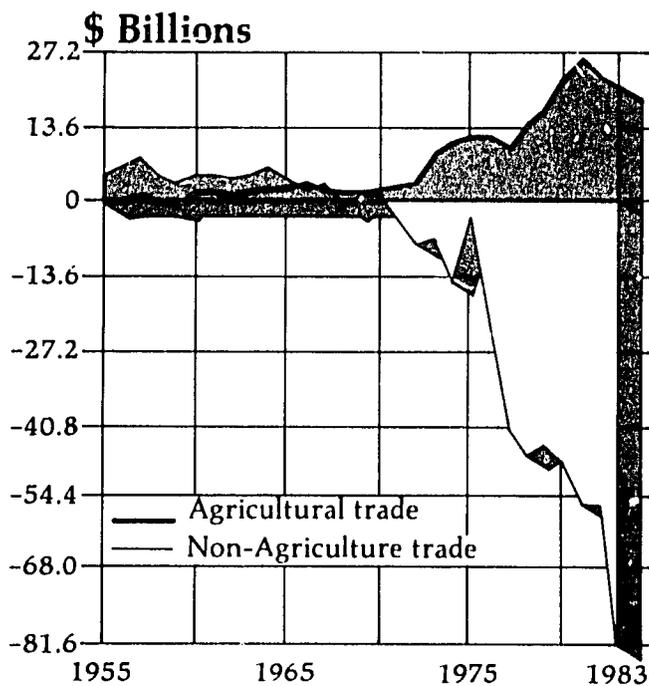
U.S. Export and Import of Agricultural Products.



Source: USDA, 1982.
Reproduced here from "Michigan Agriculture,"
Michigan State University.

Figure 3.7

Net U.S. Trade Balance.

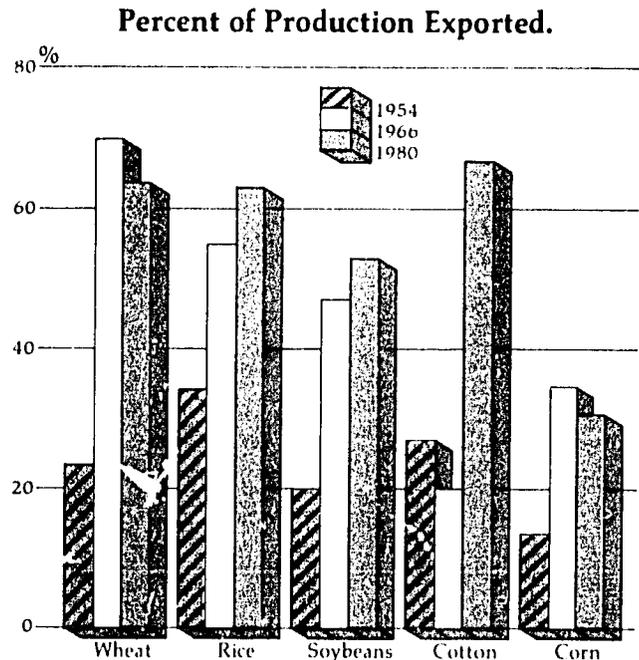


Source: U.S. Department of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States* (Washington, D.C.). January-February 1984 and various other issues.
Reproduced from World Food Institute, *World Food Trade*.

of agricultural products rose at a slower rate, allowing agriculture to amass a large trade surplus (Figure 3.7). Since 1960, the agricultural sector has shown a positive trade balance each year, and since 1979 it has averaged more than \$20 billion annually. These surpluses are used to offset the purchase of nonagricultural goods and services, which as a group have created highly negative overall trade balances for the United States each year since 1970.

The United States is both dependent on world agricultural markets and a significant trader in these markets. The nature of U.S. dependence on export markets for principal agricultural products produced in the United States can be seen in Figure 3.8. Since 1954, the percentage of production for several major

Figure 3.8



Source: USDA, 1967, 1981a.

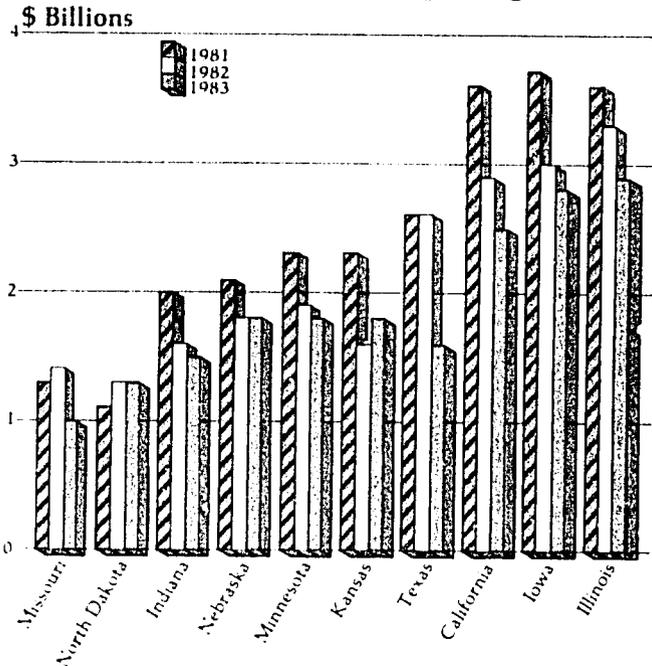
Reproduced here from same source as Figure 3.6.

U.S. crops exported abroad has risen dramatically. In 1980, more than 60 percent of all wheat, rice, and cotton produced in the United States was exported. Furthermore, about 55 percent of the soybean production and 30 percent of corn production was also shipped abroad.

Within the United States, agricultural exports are not equally shared by all states. Illinois, Iowa, and California typically lead the list of states exporting agricultural products (Figure 3.9). Most of the 11 important exporting states are in the Midwest, which reflects the basic importance of this limited group of agricultural crops in determining the level of U.S. exports.

U.S. export of these products represents a large part of the total volume passing through world markets (Figure 3.10). In 1981-82, the United States held 59 percent of the world's wheat market, 74 percent of the coarse-grains market, and 71 percent of the soybean market. These export sales have important employment effects on the U.S. economy. It is estimated that

Figure 3.9
Leading Agricultural Exporting States.



Source: U.S. Department of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States* (Washington, D.C.). March-April 1983 and various other issues and personal communication with officials of U.S. Department of Agriculture, Economic Research Service.

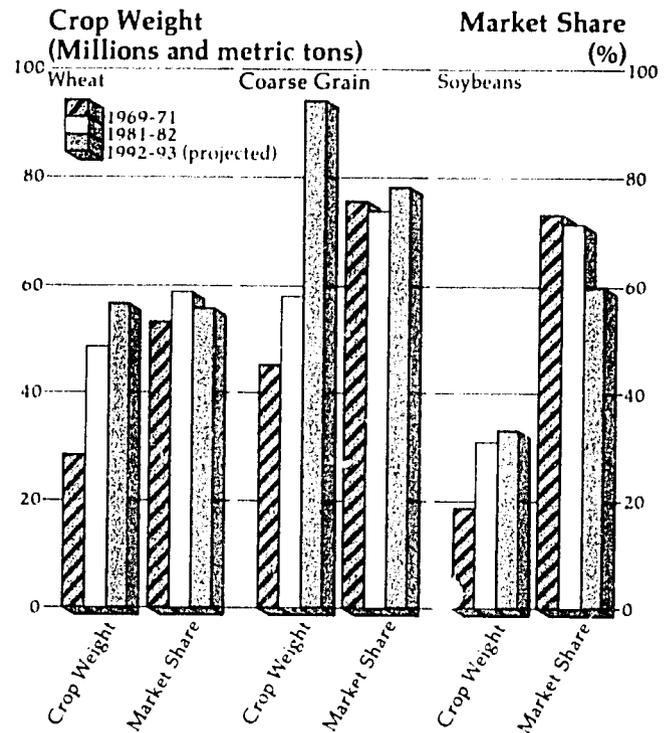
currently about 1 million jobs in the United States depend on agricultural exports. Half of them are direct on-farm jobs and the other half are off-farm jobs related to agriculture. It is also estimated that for each dollar generated by farm exports, two additional dollars are created in economic activity elsewhere in the U.S. economy.

Importance of Developing Nations

U.S. agricultural exports to developing nations represent a significant and growing proportion of total agricultural exports. Since 1970, agricultural exports destined for LDCs have more than tripled in dollar amount, and the percentage has increased from 32 percent to 35 percent (Figure 3.11). In 1980, the dollar value of these exports approximated \$15 billion, which amounted to about 38 percent of the \$40 billion worth of all agricultural exports (illustrated in Figure 3.9). During this same period, the percentage of farm exports going to developed nations declined dramatically from 66 percent to 51 percent.

This trend in agricultural exports to developing nations has a logical base and indicates the ever-increasing importance of LDCs to U.S. trade. There are two basic reasons why growth in farm exports to developing nations might exceed growth in farm exports to developed nations and become even more important with time. The first is sheer population numbers. As was pointed out in Chapter 1, more than 50 percent of the world's population is now located in LDCs, and the trend is upward. Their very presence

Figure 3.10
U.S. Exports of Selected Cereal.

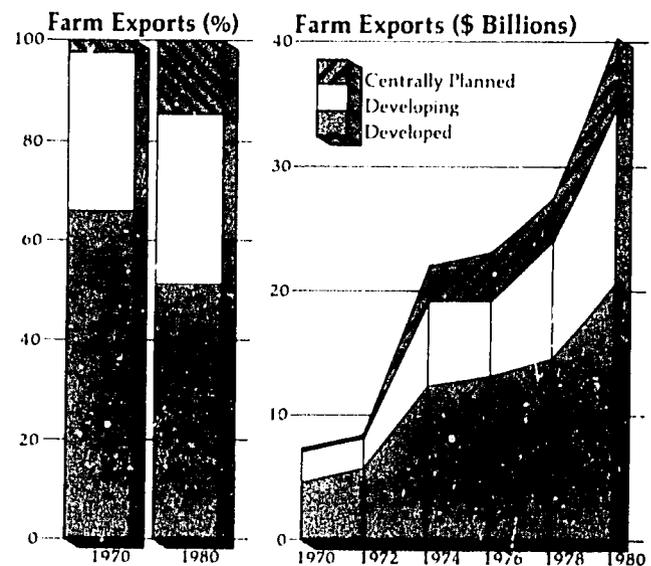


Source: Michigan State University Model. Fall, 1983. Reproduced from same source as Figure 3.6.

represents a need for food and food products, creating demand pressures for greater amounts of food.

Second, most people in developing nations have low incomes, and people with low incomes spend a higher proportion of their income on food. For example, less than 20 percent of average income in the United States is spent on food (Figure 3.12). Conversely, in India, Tanzania, and Niger more than 60 percent of people's incomes goes for food purchases. As individ-

Figure 3.11
Where U.S. Farm Exports Go.



Source: Reproduced here from same source as Figure 3.6.

ual incomes rise, these relationships persist. Additions to income for low-income families are spent mostly for food and less for other consumables. It is only after incomes reach higher levels that food needs are satisfied and a greater proportion of expenditures goes to nonfood items.

Rising demand for food not met by domestic production must be satisfied by purchases on world markets. Evidence suggests that as developing nations progress, their demand for food imports also increases, at least through some interim period until local production can better respond to the demand. Even with local production response, only selected crops will be affected. No nation produces its total food needs and once the principle of comparative advantage has helped define the products to be produced in-country, other nations will fill the demand gap. Given the large potential associated with population and income growth in LDCs, their importance as trading partners for the United States will improve.

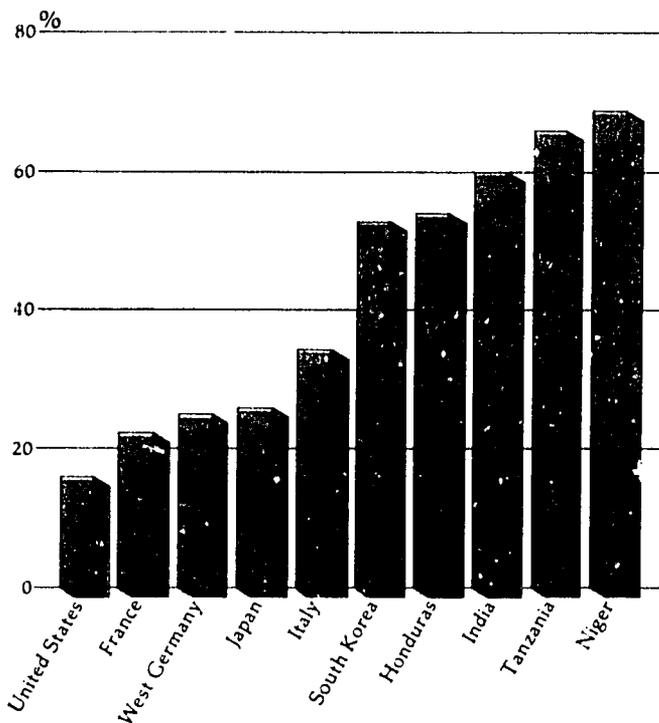
This idea can be illustrated by the history of exports to nations that have progressed developmentally since World War II (Figure 3.13). For example, agricultural exports to Brazil between 1969-71 and 1979-81 increased by 1,736 percent, to South Korea by 1,586 percent, and to Taiwan by 805 percent. These and the

other LDCs shown in Figure 3.13 have benefited from U.S. economic assistance at some time during these past 35 years. On the other hand, the growth in U.S. agricultural exports to developed nations has not equaled that found with LDCs. The highest growth rate among developed nations was 605 percent with the Netherlands. By comparison, exports to traditional trading partners like the United Kingdom increased by only 235 percent.

U.S. Trade Balance

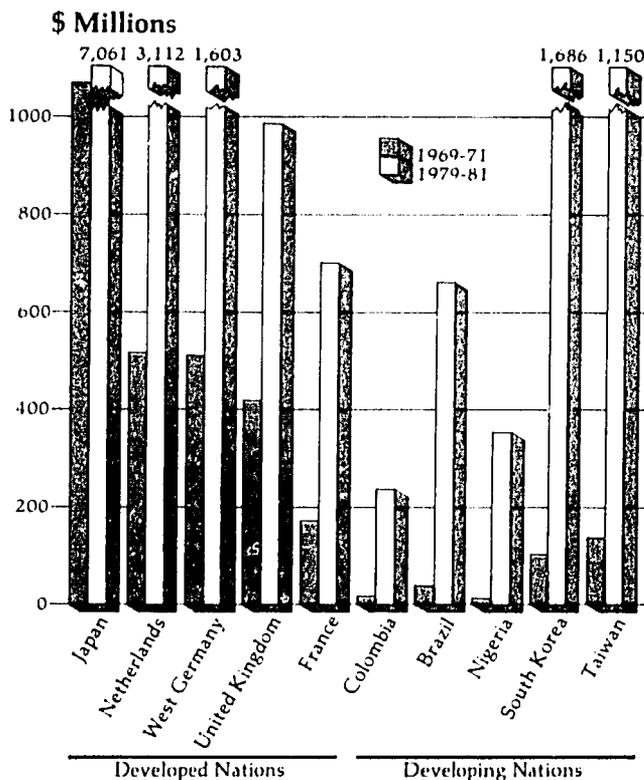
Problems of trade balance are a constant concern to the United States. Since 1970, the trade balance has been negative for all but about three years and the trend has been a deepening one (Figure 3.7). Trade with developing nations *has not* been a major contributor to this deficit. (Figure 3.14). From 1970 to 1981, exports to LDCs have risen from about 30 percent to 38 percent while imports from LDCs have risen from about 27 percent to 45 percent. The net impact on the trade balance has been about 10 percent favoring imports. However, the class of imports most responsible for the negative trade balance with LDCs has been petroleum, much of which comes from OPEC nations. Only a few of the OPEC nations are classified

Figure 3.12
Income Spent on Food in Selected Countries.



Source: Mackle, 1983. Reproduced here from same source as Figure 3.6.

Figure 3.13
U.S. Agricultural Exports to Selected Countries.



Source: Reproduced here from same source as Figure 3.6.

as poorer LDCs. Additionally, about 35 percent of total U.S. imports are complementary types essential to industry and manufacturing and most of these come from LDCs.

The trade relationships among various trading nations and groups of nations illustrate the role played by non-OPEC developing nations (Figure 3.15). In 1981, trade with these nations accounted for 30.2 percent of U.S. exports and 26.4 percent of imports. The trade surplus with these nations was about \$1 billion. There were three other groups of nations with whom U.S. trade yielded a positive balance, the principal one being the European Economic Community.

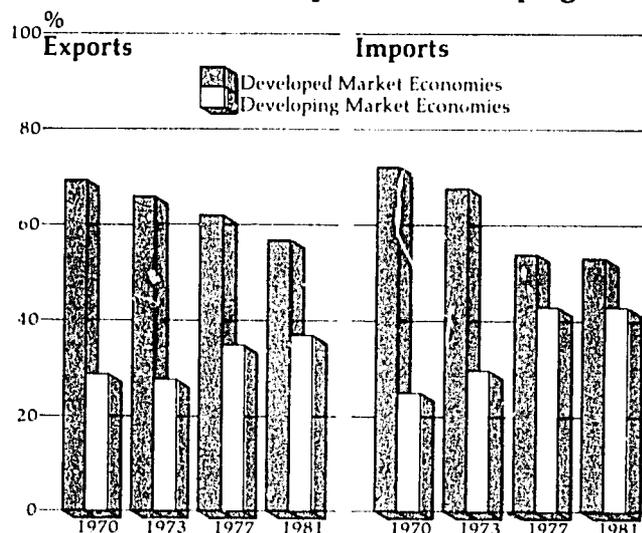
The major source of the trade deficit for 1981 was the OPEC nations (\$28 billion) and Japan (\$16 billion). Overall the trade deficit was \$28 billion. In recent years, the U.S. trade balance has worsened considerably over that of 1981. Detailed data are not available yet to see the role LDCs have played in these trade deficits. It is likely, however, that the source of the rising U.S. trade deficit is more with manufactured products supplied by developed nations than with the more staple, complementary items normally supplied by LDCs. Trade relationships with Japan and OPEC have likely continued to be the source of U.S. trade problems.

Changes in the U.S. trade balance are influenced as much by the value of the dollar relative to other nations' currencies as by most other factors. Consequently, it is improper to generalize about trade relationships based on only one year. When the value of the dollar is low relative to other currencies, U.S. exports become relatively less expensive and the volume leaving the United States expands. During the late 1970s, this happened and U.S. exports, especially those from the agricultural sector, enjoyed a dramatic upswing (Figure 3.6). In more recent years (1983-84), as the value of the dollar has risen relative to other currencies, U.S. exports have become more costly and foreign imports less expensive so the net trade balance has worsened considerably. In 1983, the deficit approximated \$60 billion.

This is one of the most critical realities that must be faced in the new order of economic interdependence among nations. Virtually every sector in the U.S. economy (including agriculture) is now subject to the pressures and vacillations of world markets and the impact U.S. public policy has in influencing these international relationships. The impacts are widespread. Even the debt-management problems of LDCs mentioned in Chapter 2, for example, can be important to U.S. trade balances. The debt obligations facing nations like Mexico and Brazil mean that resources previously available for buying U.S. imports must now be redirected to debt repayment. In 1982, for example, Mexico's imports from the United States were reportedly reduced by \$7 billion as part of a fiscal austerity program.

Figure 3.14

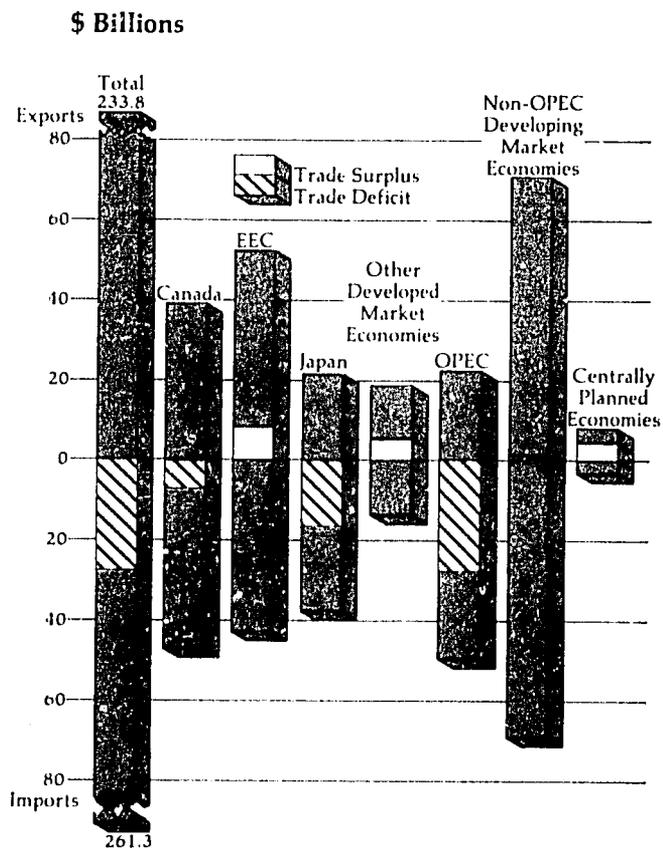
U.S. Trade with Developed and Developing Countries



Sources: ODC table based on U.N., *Monthly Bulletin*, Vol. 29, No. 6 (June 1975). Special Table B: Vol. 36, No. 5 (May 1982). Special Table C: and Vol. 36, No. 7 (July 1982). Special Table B. Reproduced here from ODC, *Agenda* 1983.

Figure 3.15

U.S. Exports, Imports, and Trade Balance, 1981.



Notes: Total world export and import figures include U.S. trade with unidentified countries not otherwise shown on this table. Export and import figures are f.a.s. (free alongside ship) transaction values. Source: ODC table based on U.S. DOC, *Highlights of U.S. Trade* (Dec. 1981). Tables E-3 and I-6. Reproduced from ODC, *Agenda*, 1983.

Developing Nations in World Trade

This discussion has centered on the importance of developing nations as trade partners with the United States. Primarily, it has attempted to demonstrate that these nations add an important dimension to U.S. economic activities and, for the most part, these are improved by the developmental assistance provided to developing nations. But nations other than the United States also assist LDCs and it is informative to see how developing nations are progressing in the aggregate of the family of trading nations worldwide.

Developing nations (non-OPEC) shipped 12.6 percent of the world's total exports in 1980. This is about the average level they have maintained since 1965. Historically, non-OPEC nations export mostly primary products, but in more recent years manufactured exports have been eroding the predominance of primary materials in the export mix of LDCs. OPEC nations, on the other hand, export mainly petroleum products and their importance has shown a dramatic increase since 1960. Normally, OPEC nations have held about a 6 percent share of the world's export market, but in 1980 the share jumped to 15.4 percent. Most of the adjustment was absorbed by the developed economies whose export share fell to 63.2 percent in 1980 from a high of 71.8 percent in 1970.

Imports to non-OPEC LDCs accounted for about 17 percent of the world total, which in 1980 represented \$338 billion. The percentage change in market share for non-OPEC LDCs since 1965 has been nominal, but the value of the imports has risen dramatically from only \$31.3 billion, a tenfold increase. However, the total imports for all nations have shown about this same magnitude of change and all nations have retained a more or less equivalent relative position.

On balance, non-OPEC nations had a slight negative trade balance in 1980 reflecting their limited export capability. But the aggregate data presented in Figure 3.15 mask the distribution of trade balances among LDCs. These data include many countries classified as LDCs that have now attained semideveloped status such as Mexico, Argentina, Syria, and Taiwan. If only the lower-income nations were counted, the trade deficit on their current account would be much more dramatic and an issue of much greater consequence. Most of these low-income nations have run trade deficits annually since their independence and the levels are growing in both real and nominal terms.

For example, Bangladesh has had a negative trade balance each year since 1971, and during the period 1980-82 it approximated \$1.4 billion each year. Furthermore, these lower-income nations are contributing only minimally to the increases in manufactured exports. Most low-income LDCs are still highly dependent on primary products and commodities for export.

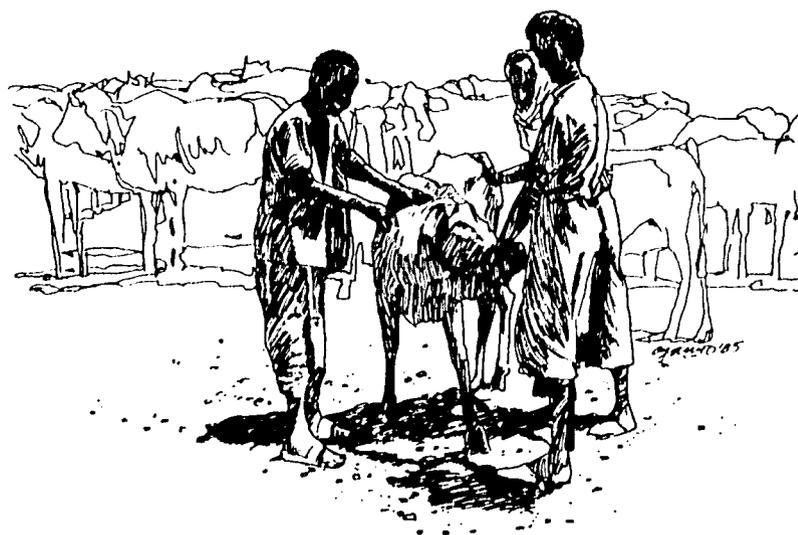


Summary Comments

There is no denying that the economic assistance program of the United States generates benefits for this nation and is not just a giveaway of resources to others. There are compelling economic and security reasons for the United States to be engaged in such assistance. Its self-serving nature is real and represents visible outcomes that are not only important to the U.S. economy, but also helpful in countering the pragmatic concerns expressed by some Americans. Taxpayers raise legitimate questions of why public funds are sent abroad instead of being used at home. Demonstration of benefits that serve U.S. self-interest can help meet these concerns and provide a justification for this extensive effort.

But there are limits to how far one can extend this argument without some reservation. The United States can benefit extensively from export sales to expanding LDCs. At the same time, rising agricultural production can serve to ignite economic growth in the Third World. At some point, however, the economic progress of LDCs and the concomitant adjustments in world market structures can logically lead to some dislocation of production and people in the United States. Successfully promoting economic development abroad will help other nations become more competitive in the community of world nations. While the production most affected will be that which depends on skills that can be more cheaply duplicated in LDCs, these are realities of particular concern to Americans.

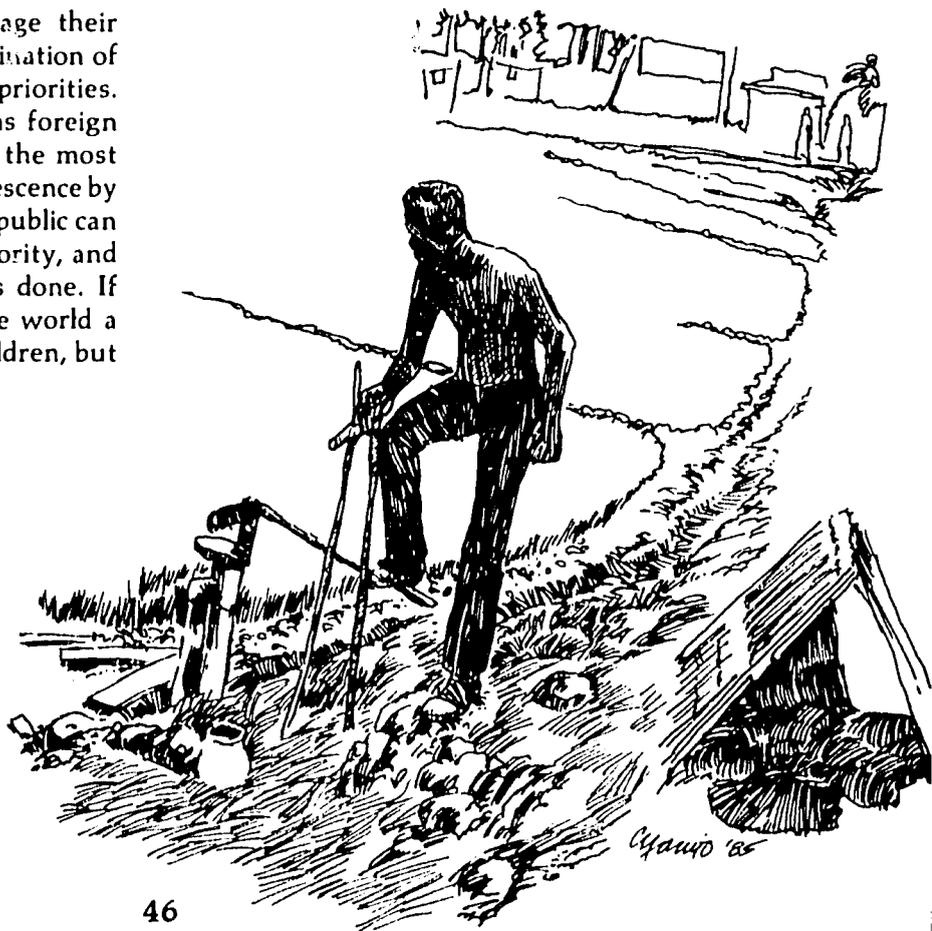
Still, the long-run outlook for the world is gloomy unless the productive potentials of LDCs are developed. Trade-offs exist. The most obvious, short-term impact on Americans will be found in higher food prices if the global food supply does not keep pace with population and other demand pressures. In the long run, extreme starvation will increasingly reoccur among nations in stress along with the degradation and high human and monetary costs starvation brings. The developed world, especially the United States, will assume much of the economic cost of these tragedies. The potential to avoid this devastation lies mostly within the LDCs.

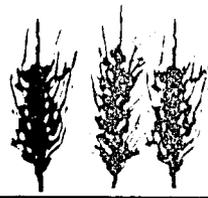


Despite the significant self-interest potentials, to justify U.S. economic assistance entirely on the basis of values arising from trade relationships with developing countries or, for that matter, any direct benefits (be they economic or military) that serve the particular interests of the United States, is to accept a diluted premise. The enormity and consequences of this effort go beyond the limited scope implied by applying U.S. self-interest as the only criteria. Finding the means to feed the world is too crucial. Potentials for creating a sustained and justifiable assistance effort would be enhanced if the moral imperative is accepted and amalgamated with U.S. self-interest. By so doing, a commitment that is both pragmatic and moral can be forged with popular support, one that decrees equality and justice for all people and the fundamental human right to be free of hunger, both within and outside of the United States. This is the kind of world that will help bring stability to the international order and opportunities for untold millions to better control their destiny and to grow and achieve the innate potential brought by their creation.

Americans can empathize with this vision of a future world, but the basic issue is whether unsensational, prodding progress characteristic of development can hold their attention and create the needed long-term political and economic support to sustain such an effort. Americans are now only dimly aware of the dimensions of world hunger and what it means to their future. They react with horror and resolution to television coverage of starvation in Ethiopia, but tend to lose interest when these emergency outbreaks disappear.

Furthermore, they do little to encourage their governmental representatives to place elimination of world hunger high on the list of national priorities. The fact that much of what is classified as foreign assistance is not directed to nations with the most critical food needs represents de facto acquiescence by the American people. Only an enlightened public can help establish such a goal as a national priority, and only a committed public can see that it is done. If successful, such an effort would make the world a better and safer place, not only for our children, but for those from every nation.





Chapter 4

FOOD SECURITY AND POLITICAL STABILITY

by William L. Furlong

The evidence presented in previous chapters, which discussed the nature of the U.S. foreign assistance program and its importance in solving the world food problem, leads to one fairly clear conclusion: A majority of the funds earmarked as foreign assistance have not and are not being used to directly combat the issues of world hunger.

Most funds support military and security assistance in nations where the issues of security, not food, are paramount. Even food aid and economic development assistance are often caught in the broad net of U.S. political and security interests.

The motive for this union of U.S. foreign assistance with security interests is found mainly in the priorities of U.S. foreign policy, which, despite the proclamation of President Truman committing the United States to worldwide economic aid, now reflect a broader set of concerns.

The U.S. State Department and the administrations of Presidents Carter and Reagan have stressed some or all of the following goals of American foreign policy during the last decade: 1) maintain peace and avoid nuclear war, 2) maintain a nation safe from invasion throughout the world (a policy of containment, reaffirmed by President Reagan), 4) maintain an international economic system that assures the United States access to markets and resources, and 5) seek a world where other nations hold similar values as the United States and have political systems that are stable and compatible with our own (stressed by President Carter's human rights and President Reagan's defense of democracy).

Eradication of world hunger is not explicitly set forth in any of these pronouncements. Efforts to eliminate world hunger are seen mainly as a means of helping to accomplish these broader policy objectives.

Much of U.S. economic assistance is conditioned by a perceived linkage between food security in LDCs and views of U.S. defense security. Revolution and major political instability anywhere in the world are perceived to have a direct impact on U.S. security interests, especially if the revolution or instability might lead to the establishment of a Marxist government. In this view, political instability is tied directly to food security, and this relationship is seen as another justification for both developmental and food aid throughout the world. Part of the rationale that has supported the evolution of security assistance has been that it would allow the efficient merging of both developmental and political objectives. Added food, it

was reasoned, would stop political instability and violence, thus allowing the United States to fulfill its foreign-policy objectives.

In this chapter, the relationship of food security and political stability are discussed. The analysis relies mostly on historical events that have been played since 1948 and the inception of U.S. foreign assistance.

Food Security and Political Stability

The concept that well-fed people are more likely to be happy and satisfied, and that such people are less likely to participate in political violence, and therefore become a threat to national security, has a logical, common-sense ring to it. It also does not necessarily hold true. Most revolutionary leaders as well as many of their followers come from upper middle-class families and economically comfortable circumstances. Many of the world's terrorist leaders fit a similar socioeconomic profile. Food problems, nevertheless, can be a catalyst that motivates the masses to participate in political upheaval and violence.

The world's poor and starving, often without the basic necessities of shelter, clothing, and securities, seldom initiate revolutionary, terroristic, or otherwise politically violent behavior. The poor usually are more concerned about survival and family than ideas and revolution. Their despair and frustration are more inclined toward inaction than violence. The starving thousands of Ethiopians are characteristic in their apathy and acquiescence. In 1984-85, they sat around refugee camps awaiting death like an old friend. Their less poverty-stricken compatriots in northeast Ethiopia were in rebellion against the government.

Similarly, middle-class demonstrations and turbulence created the political atmosphere for the bloodless coup in Brazil in 1964 and the bloody and violent coup in Chile in 1973. In Ethiopia, in 1974, ideology, military self-interest, and widespread economic problems caused the downfall of Haile Selassie in a more complex set of conditions than the food crisis witnessed in 1984 and 1985.

The instigators and leaders of revolutions, terrorism, and other forms of political violence are, in most cases, better educated than the general public. They are also better off economically and usually come from urban areas. The middle class and professionals like Fidel Castro of Cuba or Thomas Borge of Nicaragua

are much greater threats to a nation's stability than the poor and hungry peasant who has no land and little food.

In contrast, many of the followers of violence-prone leaders are from the poorer classes. Mao Tse-tung used the Chinese peasants as his sea in which to exist. Leaders in Vietnam, Algeria, and Mexico also used peasant followers extensively. The dissatisfied, the frustrated, the outcasts, and those who have little to lose often follow the charismatic, better-educated leaders. Yet they are not the only followers. Many of those who follow the Ayatollah Khomeini of Iran are college graduates from western European and U.S. universities. Many of those who joined Fidel Castro in Cuba were middle class and professionals, just as were those who supported the Sandinistas in Nicaragua in 1979. Similar characteristics are found among the followers of many revolutions, but the peasants and urban unemployed also often join.

What does turn people to acts of political violence and revolution? Social conditions and hunger can lead to group action, but the causes are more complicated. A number of theories attempt to explain the phenomenon, but most include factors beyond hunger and the lack of adequate nutrition, factors that include economic, social, and political conditions.

If there is another group with whom the disadvantaged can compare themselves, then the level of frustration can be even more severe. This concept of relative deprivation is important as comparative poverty can be a much worse condition than one in which most everyone is suffering equally. If everyone is in the same boat, there is more acceptance and sharing of a common plight. A sense of camaraderie can result. On the other hand, if someone has problems and can blame his condition on the fact that someone else is doing well, or that this someone else is the cause of his problems, this can lead to violent behavior. For example, a rich landlord who exploits the peasants taking much of their produce and leaving them constantly in debt and poverty may become the target of the peasant's frustration and eventually a target for a violent reaction.

In a similar vein, if a government is repressive and exploits its people, or supports the exploiters, it can become the target for violence. If a dictator can be blamed—a Fulgencio Batista, an Anastasio Somoza, a Shah Reza Pahlevi—that political leader becomes the symbol and the perceived cause of problems, and thus can be marked for violence.

The preconditions for and causes of political violence are varied, complex, and interrelated. No single condition is usually sufficient to create an atmosphere of instability. Economic, social, political, and international elements together or separately can create conditions conducive to violence.

Specifically, poor economic conditions can play a role, including: 1) a gap between the few very rich and the majority of the very poor, 2) severe exploitation of

one group by another, 3) a declining economy, 4) a rapid rise in expectations without a commensurate rise in capacities to meet those expectations, 5) conflict between rich landlords and poor peasants, 6) bad labor conditions, and 7) high unemployment, among many other associated economic problems.

Social conditions that can be important factors include: 1) poor education, 2) lack of health care, 3) poor and inadequate housing, 4) little prospect for future improvements, 5) ethnic differences, and 6) cultural incompatibilities.

Some of the most critical political factors leading to political violence are: 1) a corrupt political system, 2) a weak and ineffective government, 3) a government that is identified as a cause of the social and economic problems, 4) a fragmented or polarized political community, and 5) a government that lacks legitimacy and popular support.

International factors that can have an impact include: 1) a neighboring country that is experiencing political upheaval, 2) a subversive group from outside, 3) an ideology that places the blame for all social ills on the old system and also claims to have a solution to these problems, and 4) a major war that affects a nation.

The issue of governmental fragmentation is particularly important and deserves special understanding, especially in view of the focus of the present U.S. leadership to encourage democracy as a form of government in LDCs. Democracy is seen by Americans as a preferable type of government since it provides for freedom of action and participation in government processes by each individual. As viewed from the experience of the United States and other western democracies, the point is well taken. People are free and, more than under any other form of government, their voices are heard. Within limits, their elected leadership responds.

A critical factor that makes democracy work in nations like the United States is that the political community is not excessively fragmented and the consensus of a majority can be reached—the government can govern.

Consider, however, the potentials in many LDCs. In Bolivia, the United States pressed for open elections in 1978. The result has been catastrophic. More than 20 candidates representing special groups vied for the presidency. The one finally elected had only about 35 percent of the popular vote and no majority of popular or political support. Furthermore, the political freedom guaranteed all groups has created chaos as individual groups pursue special interests, which, along with the inability to compromise, has led to disruptions in the orderly process of government. Today, the nation is on the verge of anarchy, and the stress is being confounded by food shortages that are an outgrowth of the political chaos since 1978.

There are a number of complex reasons for the present state of affairs in Bolivia, which began with a movement toward democracy. Some of the contribut-

ing factors are high levels of illiteracy, unfamiliarity of people and leaders with the concept of democracy, and the absence of a political tradition of cooperation so essential to the successful operation of a democratic form of government. Perhaps, with time and experience, democracies can flourish in LDCs. Evidence suggests, however, that the concept is not a panacea for these nations, and that considerable effort and maturing are needed to make democracy work.

One of the most widely accepted theories of political instability was elaborated by James Davies. He claims that it not just poor conditions that cause revolutions, but conditions that turn worse after a period of improvement while expectations continue to rise. A similar argument can be made when the expectations rise quickly yet little changes in actual conditions. (Figure 4.1)

Some people, nevertheless, believe food shortages alone can cause revolutions. Although the reasons for revolutions are often complex, food shortages or a severe and sudden rise in prices can be the sparks that set off acts of violence and attacks on the government. If the more general conditions exist, as stated above, a food shortage can be the trigger for violence.

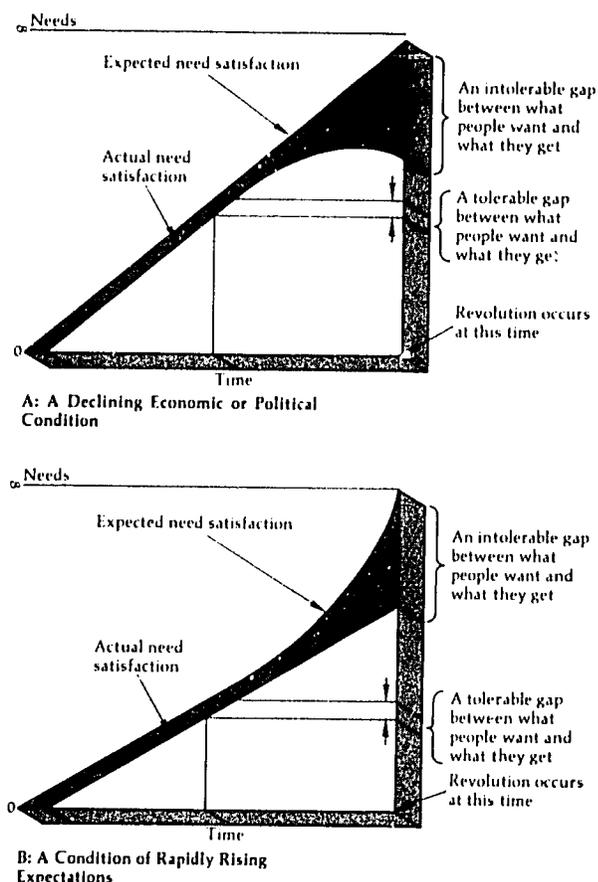
The often-remembered statement of Marie Antoinette, "Let them eat cake," in response to food shortages helped bring on the French Revolution. The Russian and Chinese revolutions also include food shortages among their many causes. Although sufficient food supplies do not ensure political tranquility and food shortages do not always lead to violent political behavior, many examples illustrate that problems of food production and distribution can be related to an upsurge of violent political activity.

Hungry people do not necessarily rebel, but people in the progressing lower classes and those in the middle classes do have a greater propensity to react violently when they have had a fairly good quality of life and that life style is threatened by the prospect of hunger and deprivation. These populations can be volatile and threaten not only the security of their own nations but the security of regions as well. Major threats to regional security anywhere in the world can be perceived by U.S. policymakers as threats to U.S. security. A Vietnam or a Nicaragua can elicit a defense response from liberal as well as conservative American presidents.

For security reasons, the United States must become more aware of conditions throughout the world that could lead to violence. It is believed that food aid and economic assistance can be used to alleviate some of these conditions, but only temporarily. According to some developmentalists, more permanent solutions also must be found. Methods of increasing domestic food supplies by improving incentives for food production must accompany food aid. Therefore, food aid and other assistance must be used to create lasting reforms, structural changes, and new institutions.

Figure 4.1

Need Satisfaction and Revolution (Davies Curve).



The North-South Dialogue

International discussions of economic issues involving developed and developing nations are often referred to as the North-South dialogue. While North-South issues range from the very technical to the very general, trade and finance are the issues discussed most often.

Developing nations want improved access for their exports and improved terms of trade, including higher and more stable prices for their exportable raw materials. In the financial areas, they seek much larger resource transfers on a more concessional and less conditional basis. They also want debt forgiveness or renegotiation on much more favorable terms for the extensive external debts they hold. To achieve these objectives, they are asking for a fundamental restructuring of existing international trade and the world monetary system. The changes envisioned would give these countries a much more significant operational role in the international economic system, including management of such key institutions as the International Monetary Fund.

On a broad international scale, the importance of food and the discrepancy in well-being between richer and poorer nations are major concerns that are closely

World Map





allied to the concern for food security and stability. A world divided between the "haves" and the "have-nots" can lead to insecurity in both areas. In the late 1970s and early 1980s, there has been much talk of a future North-South conflict. The rationale is that the north half of the world is developed and the people are well-fed and healthy at the expense of the exploited southern half, where the population is hungry, ill-housed, unhealthy, and poor.

In truth, most LDCs are below the 30th degree north, longitudinally. (Figure 4.2) The only major LDC north of this mark is China. The explanation for such a geographic distribution of rich and poor nations is complex and lies in several factors related to historical events in regions of the world. But the undeniable fact that the distribution exists is the source of considerable debate, the justification of much dialogue, and the claims that northern nations exploit those in the south.

One of the most popular economic theories today in Latin America (and repeated in other forms elsewhere) is the "dependencia," or dependency theory, which claims that the developed world purposely keeps the other half of the world underdeveloped for its own purposes of exploitation.

The crux of this theory, which views aid as imperialism, is that underdeveloped areas are purposely kept underdeveloped by the more industrialized nations. These developed nations, led by the United States, supposedly conspire against the Third World to keep it poor and illiterate. This is done to benefit the richer nations so they can buy raw materials and agricultural products more cheaply and, at the same time, sell their manufactured goods at higher profits. This theory is accepted by many Latin Americans today and is widely held throughout much of the Third World.

Dependency theory argues that economic assistance and even food aid are part of this conspiracy and that the giver benefits much more than the receiver. Some say, for example, that P.L. 480 food aid is given not to help the poor starving people, but to pay the American farmers, dispose of surpluses, and ensure that the international price of food remains above a predetermined level. To compound this, they show that in a number of countries that have received food aid, imports of food continue at high levels after the crisis and the U.S. obtains a broader market for food than it had before.

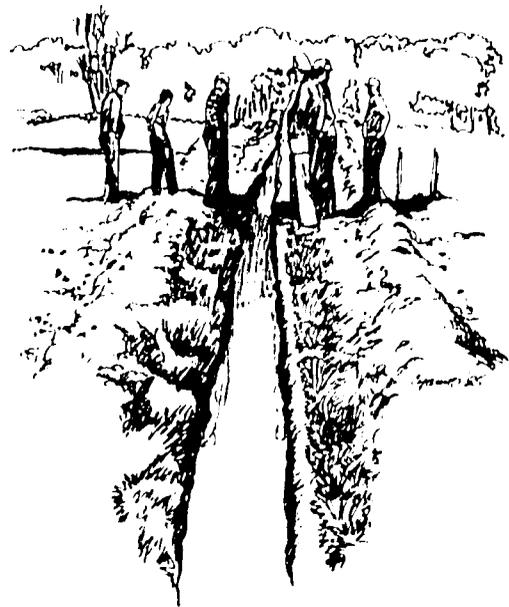
For example, Iran imported only \$15 million of American wheat in 1965. Shipments of P.L. 480 ended in 1973, yet by 1975 Iran was importing \$325 million worth of wheat, mostly from the United States. At the same time, Iran's own production of wheat declined drastically. Similar situations have been reported in other nations.

A more familiar charge, however, is that the substitution of wheat consumption for more traditional grains in many nations is done to promote markets for U.S. products. After years of P.L. 480 grain imports,

many Latin American nations, which traditionally consume corn and potatoes, have turned more and more to importing U.S. wheat. This reliance (dependency) on American grains can make a nation more vulnerable politically as well as economically. Chile serves as an example. Before 1970, Chile imported between 400,000 and 600,000 tons of wheat each year with U.S. assistance. When socialist Salvador Allende was elected president in 1970, the United States cut off government credit for food purchases, and Chilean wheat imports dropped to only 8,800 tons in 1971-72. This reduction in U.S. imports had a critical impact on the Allende government and played a part in its eventual downfall.

As with the geographical distribution of poor nations, the dependencia arguments are strongly dramatized by statistics. These data offer a perceived rationale for poorer nations to argue that they are being dominated by richer nations and to press for a new world economic order that ensures greater equality for LDCs.

The charge of a rich-nation conspiracy adds emotion to the debate and places richer nations in the role of the oppressor, providing someone on whom LDCs can blame their ills. Right or wrong or as logical or illogical as these claims may be, they still are a force to be reckoned with and understood in the operation of U.S. foreign assistance.



As stated earlier, when one group or segment can be blamed for a people's ills, that group can become a target for political violence. It is possible, given current revolutionary philosophies and the problems of food supply, that the northern nations could become the targets of terrorists, revolutionaries, and other perpetrators of violence rather than be viewed as saviors. Thus, U.S. aid can be perceived as adding to the burdens of the Third World as such efforts are perceived as ways to maintain these nations in a dependent status and to continue to exploit them. In the longer run, the North-South conflict could be as important to U.S. security as the highly publicized East-West debate.

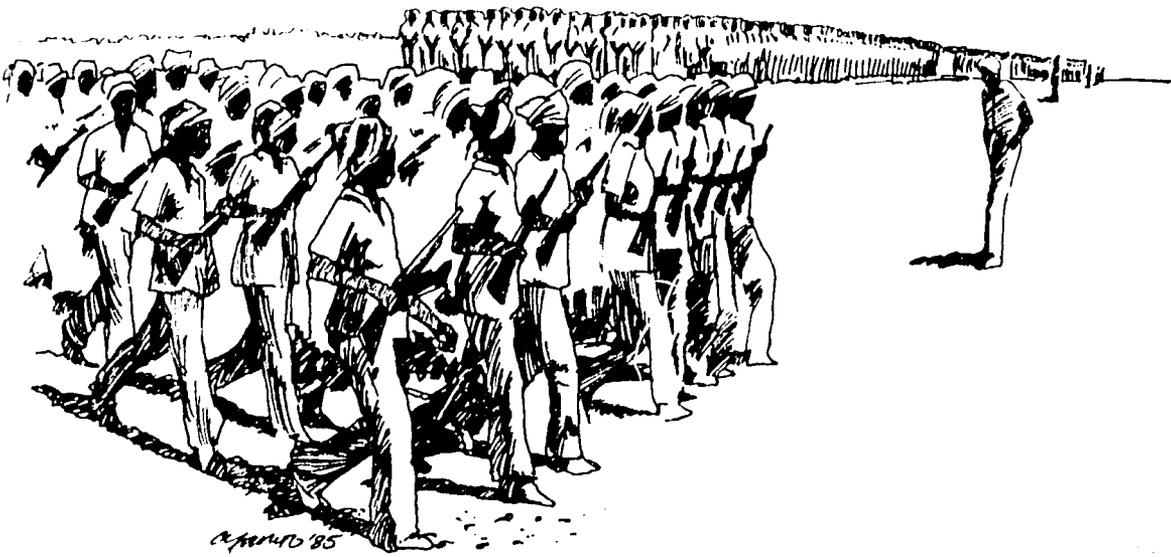
The need and desire to find a scapegoat are not always limited to individuals, but are often observed by the governments of LDCs whose attitudes are also a result of food insecurity and poverty among a large segment of their populations.

In poor nations, nearly all governments suffer from insecurity, a condition often brought by the historical evidence of repeated governmental changes and coups. This is directly the outgrowth of poverty, which leads people who are ridden with poverty to seek change since they have little to lose. For the person who has grown up with the idea that government is all-powerful and responsible for both his present poverty and a solution to his ills, maybe a new group will be better. At least they say they will. For those further up the social and political ladder, the spoils of office look attractive. For those who are clinging to office in the face of developmental failures, a scapegoat for their failures is needed to engage the passions of the people and divert their attention. The Americans, the French, or the Communists are at fault. Or, the Jews, the

Christians, or the Muslims are causing the problem. As economist John Kenneth Galbraith observed, "The poor countries are the focus of internal disturbance, insecurity, interracial friction, and international conflict because these are intimately a part of the politics of privation."

Concluding Comments

Evidence of the relationships between food security and political stability cannot be conclusively demonstrated from the experience of history. Food security has the potential to create stability yet in some cases instability has occurred in the presence of apparent food sufficiency. The factors leading to political stability are more complex than just one deficiency. Still, one's sense of right and logic suggests that the probabilities of both world peace and the stability of internal political systems are to be heightened if people in want are properly fed and their basic physical needs provided. Unfortunately, we have never known such a world or had the experience of knowing how people and political systems might react if all mankind were honestly and actually cared for. It would be one of man's greatest experiments and accomplishments if hunger and starvation could be eliminated. For many reasons, it is an effort worth making and one that is within the reach of a dedicated and worldwide effort.



References and Bibliography

The first four chapters of this handbook constitute an amalgamation of the ideas and data of a number of people and institutions concerned about the world food problem and U.S. foreign assistance. No new primary data were developed. A few summary tables were prepared by the authors in Chapters 2 and 3 regarding the history of foreign assistance. For the most part, however, tables, charts, and selected points of discussion that could be attributed to others were taken from their published works. In the interest of keeping the text and presentation as unencumbered and elemental as possible, it was decided not to use extensive footnotes in the manuscript. To the extent this takes license with accepted standards of notation, apologies are extended to the authors. The contributions of these people and organizations are clearly acknowledged and appreciated. The availability of their work made this effort possible within the limited time and other resource constraints presented by the project. Of particular importance were data previously prepared by ERS/USDA, the departments of agricultural economics at Michigan State University and the University of Tennessee, the World Bank, and the Overseas Development Council.

This manual is not intended to represent a consensus of thought and evidence, nor is it meant to encompass all of the issues and information on these topics. Both the world food problem and U.S. foreign assistance are too broad and too widely debated to contain their sum total in one limited writing. This is primarily a teaching manual that contains a summary of many of the current ideas and facts about these topics and is meant to serve as a catalyst for widespread discussion among the people of the United States.

The following 11 references were used extensively in preparing this manual and are recommended to those who use it as supplemental readings (along with additional references that follow):

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Part II

GUIDELINES FOR DETERMINING THE IMPACT OF DEVELOPMENT AND TRADE ON A LOCAL ECONOMY

by Joan Joshi

Part I of this handbook discusses interdependence and the impact of development assistance on the security and economic well-being of the United States. To make these complex issues more relevant, and thus more meaningful, to local audiences, a number of states have found it useful to document the effects of trade and development on their own economies. The guidelines that follow are designed to highlight those areas where the impact is most visible and most easily quantifiable.

The guidelines are in the form of questions and are divided into two parts:

- a) evidence of interdependence; and
- b) the local impact of development assistance.

The same questions can be asked from the perspective of a local community, a region of a state, or an entire state. They can also be answered with statistics, with case studies, or with a blend of the two. The choice should depend on the audience for which the material is intended. In any event, collection of the data will probably require considerable legwork, including visits to local financial institutions, agribusiness organizations, and industries as well as to institutions of higher education, especially the state's land-grant universities. Statistics will be most readily available from state departments of trade and commerce or of agriculture, the U.S. Departments of Agriculture and Commerce, and the U.S. Agency for International Development.

Initial contact should be made through the following offices:

Information Division
Office of International Cooperation and Development
U.S. Department of Agriculture
Washington, D.C. 20250
(Tel. 202/475-4071)

Office of Public Affairs
U.S. Department of Commerce
Washington, D.C. 20230
(Tel. 202/377-3263)

Office of Public Inquiries
Bureau for External Affairs
Agency for International Development
Washington, D.C. 20523
(Tel. 202/632-1850)

A. Evidence of Interdependence

1. Exports:^{*}

- a. Which locally produced goods (agricultural and industrial) are exported?
- b. How much do they earn?
- c. What percentage of local industry or agriculture do they represent?

Example: Percentage of acreage producing for export, percentage of crop X or manufactured product Y exported.

- d. How many jobs are directly involved?
- e. What are the indirect benefits to the local community/state?

Example: Dollars circulating in the local economy as a secondary result of export earnings, numbers of jobs these create.

^{*}In making export calculations, it is useful to note the methodology described in a brochure produced by Virginia Polytechnic Institute and State University, Blacksburg, VA:

"Determining which U.S. agricultural exports were actually grown on Virginia farms is about like trying to determine which part of the pond the water in the drain pipe is coming from. In a market economy, commodities, like pond water, seek a new level once some is removed.

"In view of this market fluidity, estimates of Virginia's share of U.S. exports have been made relating Virginia's sales of commodities to U.S. sales of the respective commodities. Such a procedure for estimating export shares assumes that U.S. exports have a proportionate impact on each state producing the commodity. Although the product of a given state may not actually be exported, the product of that state has the opportunity to meet the demand for such a product that otherwise would be met by the exported item."

2. Imports:

a. What raw materials are imported for local industry or agriculture?

b. Why are they imported?

Example: Materials not produced, grown or mined in the United States, or an import price substantially below the domestic price.

c. How does the local consumer benefit from imports?

Example: Prices moderated owing to competition from foreign goods, goods available (coffee, diamonds) that cannot be produced locally.

d. What negative impacts do imports have on the local economy?

Example: Number of jobs lost through foreign competition, dollar losses to local industry and agriculture.

3. Financial Ties:

a. How much and in what industries have local industries invested abroad?

Example: Overseas subsidiaries.

b. What are the earnings on these investments?

c. Has this had a positive or negative effect on the local economy?

Example: Jobs lost or created, decrease or increase of dollars in circulation.

d. How much have local financial institutions loaned to foreign governments and institutions?

e. What are the earnings (or losses) on these loans?

f. How much foreign capital has been invested in the local economy and in which industries?

g. How has this investment affected the local job market and the dollars in circulation?

4. Educational Ties:

a. How many foreign students are enrolled in local institutions of higher education?

b. What positive and negative impacts do they have on the local economy?

Example: Their expenditures for tuition, room, and board versus local government subsidies for their tuition.

c. What ties do local educational institutions and their faculties have with institutions abroad?

Example: Formal institution-to-institution affiliations, collaborative research projects, consultancies.

5. Cultural Ties:

a. Is there local participation in the Sister Cities or Partners of the Americas programs?

- b. What international programs in the arts do the local population patronize?

Example: Foreign movies, imported television shows, performances of visiting artists.

6. Ethnic Mix of the Population:

- a. From what parts of the world did the local population immigrate to the United States?
- b. Is there a recent immigrant population?
- c. Why and how did they come to the United States?
- d. What are its members contributing to the local community/state, or what problems are created by their presence?

B. Local Impact of Development Assistance Programs

1. Project dollars spent in the local community/state for goods and services:

- a. How much is paid to local people, especially university staff, to participate in AID projects?
- b. What locally produced goods are purchased for use in AID projects (or those of other funding agencies, such as the World Bank)?
Example: Trucks, fertilizers, irrigation equipment.
- c. How many P.L. 480 dollars are spent on the purchase of local agricultural products?
- d. How many of the foreign students at local institutions are participants in AID training programs?

2. Byproducts of development assistance activities:

- a. What germplasm, originating abroad and identified in development assistance projects, has been introduced into local agriculture?
- b. Are there any methodologies developed through development assistance projects that have been useful to local agriculture?
Example: Farming systems methodology, increased understanding of technology transfer to agricultural producers, new cropping systems.

3. Impact on trade:

- a. How have local industry and agriculture been affected by development abroad in the last decade, two decades, three decades?
- b. Has development in certain countries led to competition with local products?
- c. Has increased purchasing power in certain countries led to their import of local products?
- d. Has *lack* of development in certain countries, or their decreased purchasing power had any effect on the local economy?

Example: Decreases in exports, disappearance of foreign goods from the market, immigration of competitive (or needed) foreign labor?



DEVELOPMENT EDUCATION PROGRAMS

by Joan Joshi

Although many institutions, especially those with religious affiliations, have worked for years to increase public awareness of the issues addressed in this handbook, AID's Biden-Pell support has stimulated a proliferation of programs. Collectively known as "development education," these programs have as their goal "to create a level of public understanding, promote values, and stimulate actions that:

- Recognize the interdependence of the world's people and particularly the commonality of interests between the United States and the developing world;
- Contribute concretely to eliminating root causes of world poverty and inequity and to removing obstacles to development." See end of Part III

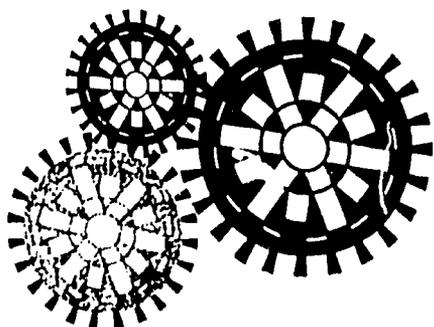
What follows is a sampler of projects, activities, and events that take a variety of forms, presented to convey the range of possibilities in development education. Many other programs that are equally effective have been generated; the choice of what to include or exclude was difficult. Some of the organizations noted below have produced resource lists identifying materials and activities developed by other groups. As this manual was being published, thought was being given to creating a central resource bank for development education materials.

1. World Food Day

Some 150 government and people's organizations of all kinds at all levels around the world have observed World Food Day each year since 1981 on October 16, the founding date of the Food and Agri-

World Food Day

These interconnected gears of different sizes and colors are symbolic of World Food Day. They can represent the local, national, global partnership, people networking, ideas in action, coalition building, organizational collaboration, cross-sectoral planning, or anything that motivates and mobilizes effective action creatively and cooperatively.



culture Organization. In the United States, the National Committee for World Food Day is sponsored by more than 350 private volunteer organizations that share a commitment to solve the problems of hunger and poverty. Such coalition building is one of the movement's goals. The committee believes that when organizations collaborate, the strengths of each are multiplied rather than added, that sharing deeply felt concerns inevitably leads to planning and acting together.

The national observance in 1984 involved a congressional resolution and presidential proclamation of World Food Day. The occasion was marked by a nationwide teleconference that united the country on the issues in a kind of town meeting. The conference was telecast from noon to 3 p.m. (EDT). The first hour featured a panel composed of the Secretary of Agriculture, a member of Congress, the executive director of BIFAD, the ambassador of a Third World country, the president of a major university, and a representative of FAO. Actor Eddie Albert was the chairman. The second hour was devoted to local activities and speakers while the central station remained dark. In the third hour, participants from around the country called into the Washington station with questions for the panelists.

At the local level, schools, colleges, churches, clubs, and volunteer organizations have observed World Food Day by planning hundreds of activities each year. Among these:

- A farm-state coalition for World Food Day organized a statewide gathering of wheat, which culminated on the steps of the capitol with a speech by the governor. The wheat then was donated to an international relief organization.
- Because of the appeal of World Food Day to conscience and compassion, many religious denominations have placed October 16 on their liturgical calendars, preparing special materials for worship and study.
- In the middle hour (for local activity) of the national satellite teleconference, many universities chose speakers from developing countries, often found among visiting faculty or foreign students, to get firsthand knowledge of world hunger problems.

The observance of World Food Day has often motivated later events, such as:

- In an eastern state capital, the fact that the World Food Day coalition was already in place provided the structure for an Ethiopian famine relief campaign.

- A city coalition prepared a directory of "food resources" that was used as a model for a coalition in another state to publish a directory of resources for emergency assistance for the hungry and homeless.
- Because of a contact made through World Food Day, a National Committee member organization and a state university jointly planned a conference on rural women and the economics of hunger.

The National Committee for World Food Day (1001 22nd Street, N.W., Washington, DC 20437, Tel. (202) 653-2404) can provide information on activities planned by and resources available from its member organizations.

In addition, the World Hunger Education Service (WHES)—(1317 G Street, N.W., Washington, DC 20005) publishes a useful aid to coalition building and resource collection: *Who's Involved with Hunger, An Organization Guide for Education and Advocacy*. The fourth edition, published in 1985 with partial support of AID, describes the purposes and nature of the work of about 450 organizations—both public and private—from which information is available on the technical factors relating to hunger and poverty in the United States and the Third World. The cost is \$8, including postage and handling.

WHES also publishes Hunger Notes nine times a year. The double issue for June and July is an annotated bibliography of current books and films on hunger, poverty, food production and distribution, development, life style, and advocacy. Each of the other eight issues covers one topic in depth, with a guide to further sources of information and program materials. Single issues are \$2.50, the double issue is \$4. Subscriptions are \$15 for individuals, \$25 for institutions.

2. Development Education in the School/College Curriculum

The formal education system provides one setting for development education, and a number of organizations have responded to teachers' specific needs.

With the support of a 1983 Biden-Pell grant, a New York-based organization prepared a curriculum package titled *World Hunger: Learning to Meet the Challenge*. It is designed to educate teachers and students in the basics of world hunger and to guide them in organizing student groups to take action that will help combat hunger, both locally and globally. The package is divided into three sections:

- Background information on world hunger: who and where the hungry are, what it is like to be hungry, why we have hunger, what is being done about it, what needs to be done, and how people can become involved.
- Teaching strategies for elementary, junior, and senior high school. The secondary strategies are designed for five school disciplines: social studies,

language arts, visual arts, the sciences, and health and nutrition.

- Resource materials: books, films, organizations to contact, evaluation procedures, and a guide to forming and carrying out student action.

The package is available from Impact on Hunger, 145 East 49th Street, New York, NY 10017, Tel. (212) 355-2922. A \$6 donation is requested to cover printing and postage for each curriculum, but no one will be refused a copy because of inability to pay.

Another Biden-Pell grantee, the International Nursing Services Association (INSA) of Atlanta, produced *Teaching about Developing Nations...The Role of Food and Hunger* for grades 6 and up. The curriculum takes a factual approach to understanding the global implications of hunger and poverty in developing countries. It includes seven units: Personal Nutrition; Facts about Hunger; Haiti: A Developing Nation; Water, Water Everywhere; Follow-up; Resources, and Evaluation. Materials can be duplicated. Each unit and its activities can be used independently or in conjunction with others, and optional activities are suggested for more thorough study.

Order from INSA, P.O. Box 15086, Atlanta, GA 30333, Tel. (404) 634-5748. Cost is \$6 a copy.

Global Perspectives in Education, Inc., serves elementary and secondary school teachers with numerous resource materials (equally useful in informal educational settings). Among them are resource bibliographies on food and hunger and on development generally, including books and articles for teachers and students, curriculum units and kits, simulation games, and films and film strips. Bibliographies, at \$2 each, and a full publications catalog of "curriculum materials for a global age" may be ordered from Information Center, Global Perspectives in Education, Inc., 218 East 18th Street, New York, NY 10003, Tel. (212) 475-0850.

University-level curricula have also been designed. At Swarthmore College in Pennsylvania, a seminar in *Food and Famine: Past and Present* is offered in the history department, with collaboration with faculty in social and natural sciences. In addition, Swarthmore (and four other small liberal arts colleges) recently received a major grant from the Kellogg Foundation to develop a Food Systems and Food Policy Program to give students a better understanding of the relationship between food systems and the policies pursued by governments and international agencies. The project, which will reach beyond the student body itself, is directed by Professor Ray Hopkins, Department of Political Science, Swarthmore College, Swarthmore, PA 19081, Tel. (215) 447-7127.

3. Outreach Through the Media

Development education can affect large populations through the use of electronic or print media.



John Hamilton, former foreign correspondent and current World Bank official, recently conducted an experiment with Frank Sutherland, managing editor of the Hattiesburg, Mississippi *American*, a 25,000-circulation daily newspaper. The experiment was designed to test how much "foreign news" the newspaper's readers would tolerate if it was cloaked in stories reporting local connections. What resulted was a five-day, front-page series called "Main Street Mississippi and the Third World." It touched on many segments of life in Hattiesburg: exports from local businesses, imports used in local manufacturing and sold to local consumers, migrants contributing to the community, foreign students in local institutions, and community-sponsored foreign-aid programs. According to a subsequent survey, the percentage of *American* subscribers reading each of the five main stories ranged from 38 to 57. (The nationwide average readership of all front-page stories is 47 percent.)

For a copy of the series, write J.M. Hamilton, D-828, The World Bank, 1818 H Street, N.W., Washington, DC 20433, Tel. (202) 447-5762.

At Michigan State University, volunteers and extension staff designed a series of six public service announcements to help Michigan residents become more aware of some of the state's international ties. A television station in northern Michigan donated staff time and production facilities to produce the 10- and 20-second tapes. Each showed Michigan residents using a Third World product or engaged in a familiar activity and a parallel picture from the Third World; each closed with the words, "Michigan: Partners with the World" and a zoom shot showing the state linked with the world. The texts:

- Coconuts from the Third World are used in many of our everyday products.

- We depend on Central America and other Third World nations for the bananas we enjoy.
- We depend on the Third World for the chocolate we enjoy.
- The tea we enjoy is grown by Third World farmers.
- Water...we all need it, but only half of us can get it easily. (Pictures of a Michigan girl getting water from a faucet and an African woman carrying water in a jar.)
- For most of us in Michigan, firewood means a relaxing campfire or an alternative source of heat; but for almost half the world's people, firewood is their only affordable source of energy. In Nepal, soil erosion from deforestation washes away agricultural land and contributes to flooding. Researchers from Nepal and Michigan State University have worked together to find solutions to Nepal's forestry and energy problems. (Pictures of Michigan teens around a campfire, soil erosion in Nepal, and MSU researchers working with Nepali researchers.)

Michigan Extension emphasizes volunteer involvement in program design since it not only makes maximum use of resources but provides a better learning experience for the volunteers and a chance for the staff to learn "what the folks want." This activity as well as another described as "exhibits" below was funded by a mini-grant to a volunteer group from an AID-supported project of the Michigan Partners of the Americas and the MSU Extension Service titled, *Feeding the World: International Interdependence Project*. For more information on this strategy and on the range of projects developed, contact International Extension Training Program, 48 Agriculture Hall, Michigan State University, East Lansing, MI 48824-1039, Tel. (517) 355-0115.

The Purdue University Office of International Education and Research sponsored a series of World Bank films over Greater Lafayette Cable Television. According to Purdue, the films helped citizens understand the thrust of international development, the issues, the relevance of global interdependence, and the impact LDCs have on such Indiana communities. One such film, *Nimai*, is the story of a farmer in West Bengal and of agricultural development in areas where rice, jute, and sugar cane are grown. The film demonstrates the Training and Visit system designed by Daniel Benor that has been highly effective in teaching farmers how to triple their output within two years simply by improving methods of cultivation. Based on the use of an agricultural extension agent who visits farmers with advice and assistance on a regular basis, the system has been used by 50 million farm families in India. Since understanding this agricultural project requires an understanding of the hopes and ways of life of the people it affects, great care is taken in the film to present the culture and life style in Nimai's home village.

World Bank films rent for \$20-25. A catalog is available from The World Bank Film Library, Room D-842, 1818 H Street, N.W., Washington, DC 20433, Tel. (202) 477-8350.

4. Conferences, Workshops, Meetings

Development education can take place in public gatherings of all kinds.

OEF Internationals, by means of seed money grants from a larger AID grant and organizational guidance, served as a catalyst in the development of one to two workshops for women in six U.S. cities. Each workshop was planned and sponsored by a coalition of local organizations. The programs revolved around the theme, *Women and World Hunger: The Role of Women as Food Producers*. It reached 17,000 participants from entrepreneurial and corporate women's groups and widely based women's organizations. Their goal was to move from awareness to individual and community action designed to eliminate the root causes of world hunger and poverty.

OEF's experience in developing such meetings has been incorporated into a resource handbook for people interested in organizing community workshops to learn more about women overseas and how Third World development problems are linked with those in developed nations. The *Women and World Issues Handbook* is divided into three sections: Setting the Stage; "Action" Model—How to Use It, and Guide for Task Groups. The model is participatory and emphasizes widely based community involvement. A one-year work plan with a step-by-step calendar is included.

The handbook is available from OEF Publications Service, Suite 916, 2101 L Street, N.W., Washington, DC 20037, Tel. (202) 466-3430. Other useful materials are listed in OEF's catalog of reports, surveys, and manuals.

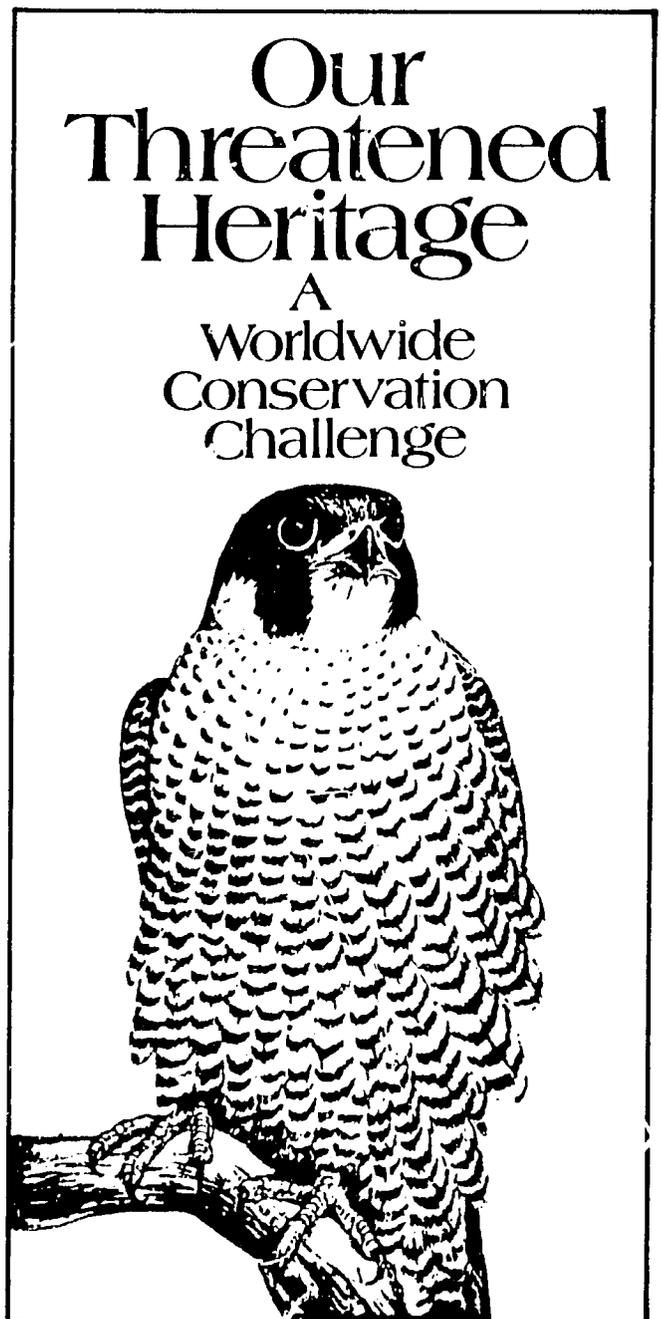
The Minnesota Awareness Project (MAP), with partial AID funding, assists state residents in organizing awareness activities. Often, teams of international student speakers trained by MAP visit Minnesota communities and make presentations to schools, churches, and community organizations. Playing a crucial role to expedite these activities are MAP community representatives who work with local groups to plan meetings on the issues of food and poverty.

In October, 1983, MAP speakers participated in a retreat weekend for 4-H members and leaders at a nearby campsite. There, the 4-H'ers met students from Ghana, Ethiopia, Mexico, and Nepal as well as professionals from the state Agricultural Extension Service, the Washington County Community Health Office, the Peace Corps, Save the Children, and the Stillwater Valley Food Co-op. Participants learned about cooperative games, good nutrition, and food and family customs of people from other countries. They also had opportunities to talk about ways they could make an impact in their homes, communities,

and the world, beginning with awareness. Activities developed for the retreat, *Food: An International Family Affair*, have been compiled into a resource guide for leaders.

MAP strongly recommends international students as a development education resource; almost 350,000 are now enrolled in U.S. colleges and universities and are easily contacted through an institution's foreign-student advisor.

A collection of public relations and content material to assist local representatives of community-based development education projects in organizing programs is available at a cost of \$4 from Minnesota Awareness Project, 711 East River Road, Minneapolis, MN 55455, Tel. (612) 373-0055.

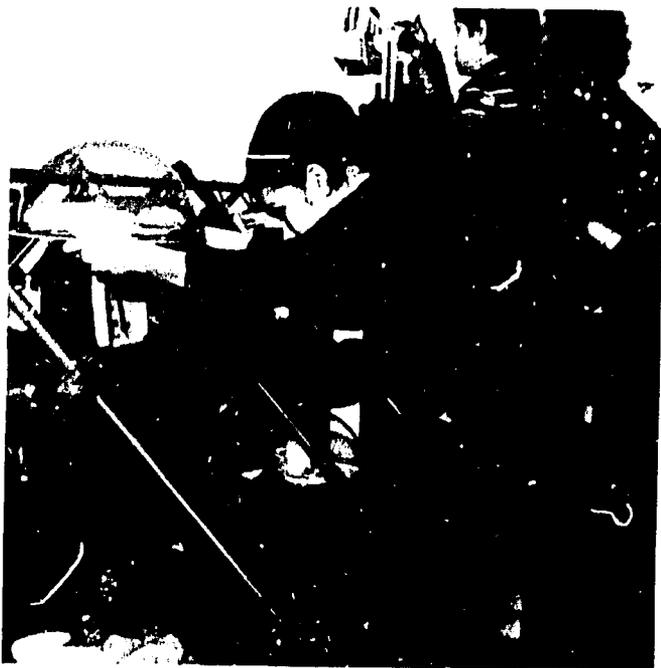


The National Wildlife Federation's Biden-Pell program focused on environmental problems in Latin America (for example, deforestation, pesticide misuse) and their effects on economic development and global environmental quality. The program consisted of a series of meetings around the country designed to present Latin American environmental issues to conservation organizations, school groups, and other interested audiences. A demonstration of a live migratory bird (a peregrine falcon) introduced these audiences to the fact that migratory wildlife populations can be adversely affected by ecological disturbances in their Latin American overwintering habitats. A slide show, educational literature, and guided discussions further explored the adverse effects that environmentally unsound development practices can have on global natural resources, population, and economic growth. The meetings were intended to prompt follow-up activities that address the issues, such as twinning with an environmental group in Latin America, raising funds for an environmentally sound development project, or purchasing environmental education materials for a Latin American conservation group or school.

A booklet, *Our Threatened Heritage: Worldwide Conservation Challenge*, linking environment and development in a comprehensible way, is available free of charge. The 30-minute slide show—without the falcon—may be borrowed from International Program, National Wildlife Federation, 1412 16th Street, N.W., Washington, DC 20036, Tel. (202) 797-6800.

5. Exhibits

Education can also take place through exhibits—placed not only in museums but in schools, libraries, shopping malls, department stores, community centers, and other sites where passer-by traffic is heavy.



Save the Children collaborated with Teachers College of Columbia University to produce—again, with partial support from the Biden-Pell program—an interactive, multimedia exhibition on children in an interdependent world. The exhibit, *Someone Like Me*, features a UNICEF film; children's artwork, poetry, games, and music from different parts of the world; descriptive maps; several participatory games, including a computer game in which players act as the head of a hungry family seeking to make the best use of limited resources; a display that helps participants experience the effects of inadequate diet on energy levels and growth; a structured environment in which visitors engage in a simulation of the two chores most commonly performed by children in the Third World: gathering firewood and fetching water, and Do It!, a station that encourages action to help end hunger and poverty. Pre- and post-visit materials were prepared for teachers leading school groups.

For information on the exhibit, contact National Outreach Division, Save the Children, 54 Wilton Road, Westport, CT 06880, Tel. (203) 266-7271.

Staff and volunteers on the Michigan State 4-H Crops and Soils Science Development Committee prepared a portable exhibit to introduce state residents to some of the ways in which Michigan is interdependent with other countries. The exhibit has been used primarily by 4-H youth agents who have arranged to have it displayed at state extension service events such as Crop-O-Rama, Farmers Week, Extension School, and World Food Day.

With pictures and text, the exhibit—*Partners in Agriculture: Our Interdependence with the World*—covered Michigan's agricultural exports, Third World trade partners, and tropical foods in Michigan markets. It was accompanied by a handout with 4-H project ideas.

This is one of the activities of the Michigan Partners/Extension Service project described under "media" above.

6. Games and Experiential Activities

Projects that require active participation often make the most long-lasting impact on the mind.

A simulation game, *The Twenty-First Year*, is designed to familiarize individuals with some of the differing approaches proposed for helping poor nations. Players act as officials of the Planning and Development Office of Talesh, a developing country of the Third World. Planners are first briefed on the climate, population, economy, and so forth of Talesh, then presented with a choice of development strategies for each of three planning phases ending in the year 2000. The choices include some of the most advanced theories of development as well as some of the approaches that have proved unsuccessful or even counterproductive. Players must reach a consensus within a fixed time (since time is a factor in development) among four strategies in each of four areas: employment, health and education, international trade, and other aid including security assistance.

At the conclusion, each decision is evaluated based on studies of how that strategy is working in the world today and an overall score is assigned. This, in turn, translates into a description of the quality of life in Talesh at 2000 so players can determine the ultimate impact of decisions made in early development stages.

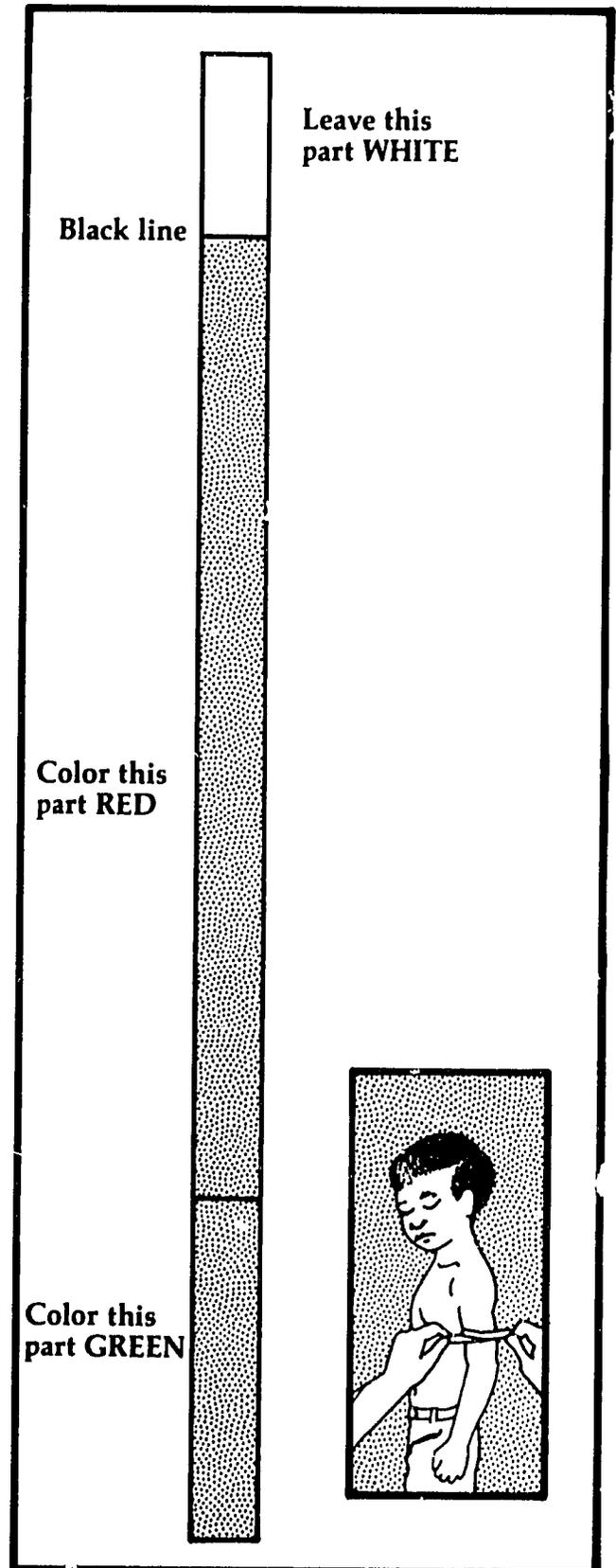
The game of Talesh is part of *Ending Hunger, It's Possible, It's Happening* available from Information Service, American Friends Service Committee, 15 Rutherford Place, New York, NY 10003, Tel. (212) 598-0972. The cost is \$5.50 plus 15 percent for postage and handling.

The INSA staff (see "curriculum" above) conceived a series of creative activities for school groups, 4-H clubs, Girl Scout troops, and the like as part of INSA's "awareness to action" approach to development education. Four examples:

- Children construct hand puppets for use by INSA health trainers in India to illustrate oral rehydration therapy. American youngsters are encouraged to put on a performance for their friends and families before mailing the puppets to India. A script and directions for making puppets are available.
- Other groups collect and clean small, 35mm film cannisters that are used as waterproof containers for medicines distributed through INSA projects abroad.
- Children cut out and color arm circumference bands for distribution by INSA health workers to mothers in Haiti to determine the presence and degree of malnourishment in the Haitian children.
- School classes raise money to "adopt a goat" through a project designed to upgrade the Haitian goat population by breeding local does with purebred Nubian bucks at Winrok International's experiment station in Hinche. In the process, American children learn about goats and the importance of their milk and meat to family health and nutrition as well as the economic impact when farmers sell these products. In Haiti, after does are bred, farmers are taught their proper care, and INSA's trained extensionists are supplied with tools for both routine and emergency medical care for goats. Participating farmers agree to return one kid to the project to be given to another family. A self-learning manual about goats for young people is available.

For information on all these activities, and others, inquire at INSA, P.O. Box 15086, Atlanta, GA 30333, Tel. (404) 634-5748.

It's Only Hunger is a sensitizing activity that allows participants to experience the feeling of hunger and the boredom of eating a monotonous diet and to focus feelings about the prospect of living with hunger and poverty. Modified forms of this activity have been used successfully with both youth and adult groups.



Instructions: Gather 25 to 50 people together for a day-long hunger experience. Announce in advance that all three meals will be served. On arrival, quietly separate participants into "haves" and "have-nots" by randomly selecting one-fourth of the group to represent the "haves." This can be achieved by drawing lots, using symbols on name tags, or other similar methods. Provide comfortable chairs and tables for the privileged group and plan to serve them more-than-adequate, nutritionally balanced meals. Their tables should appear overabundant and be located close enough to the "have-nots"—who are seated on the floor—that the groups can see each other. Serve the "have-nots" for the morning and afternoon meals a small cup of diluted tea, a small-to-medium-size piece of bread, or a small bowl of rice. For the evening meal, serve a small bowl of watered-down chicken and rice soup and a piece of fruit.

Program: During the course of the day, time could be spent providing background information on the scope and dimensions of world hunger. Films or slides could be shown that focus on the world food problem, followed by group discussion, playing simulation games, reading, and so on. Group members should remain together the entire time, if possible. Near the end of the program, debriefing should focus on reactions to:

- a. the feeling of hunger;
- b. the feeling of confinement;
- c. boredom, resentment, frustration, hostilities;
- d. the feeling of being a member of an affluent minority, or of an impoverished majority;
- e. how the "have-nots" perceived the "haves" and vice versa, and
- f. if there were beggars, how it felt to be one, or to be begged.

7. Training Programs for Development Educators

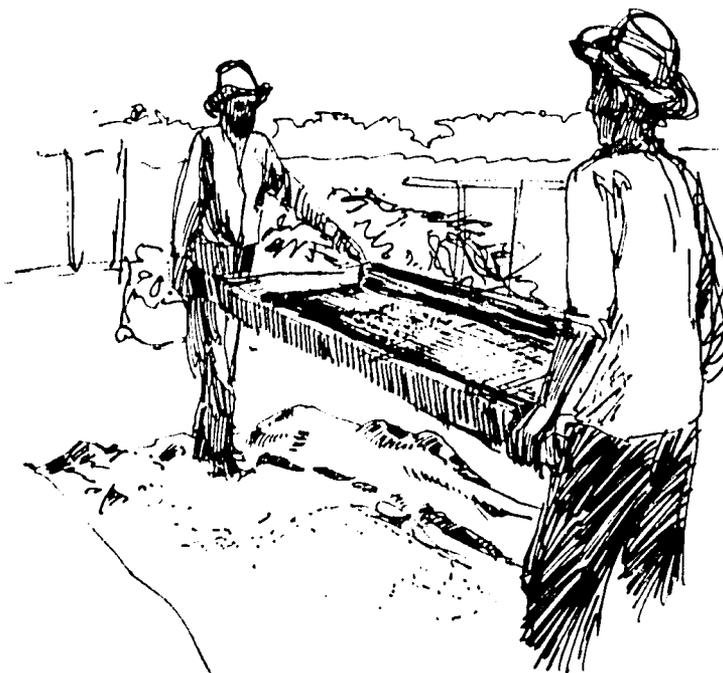
Several organizations have used Biden-Pell support to train those who will serve as development educators for a wider audience.

Partners of the Americas trained two volunteers from each of its Central American and Caribbean partnerships in a three-day seminar. Participants were briefed on the concept of development education and on development issues relevant to their geographic area of interest. They also played a simulation game that emphasized the impact of culture on development issues relevant to their geographic area of interest. And they were assisted in identifying resources and in designing an educational project to increase awareness of their partnership area among school and community groups in their home states. Small grants were made available to aid in the purchase of materials.

The seminar involved knowledgeable speakers (a representative of the Inter-American Foundation, the deputy director of AID's Central American Office, among others) but also engaged the volunteers in participatory activities and allowed ample time for discussion with speakers and among themselves. The 34 participants now form a network available to assist others in their communities.

For information on the seminar and a network list, contact Development Education Coordinator, Partners of the Americas, 1424 K Street, N.W., Washington, DC 20005, Tel. (202) 628-3300.

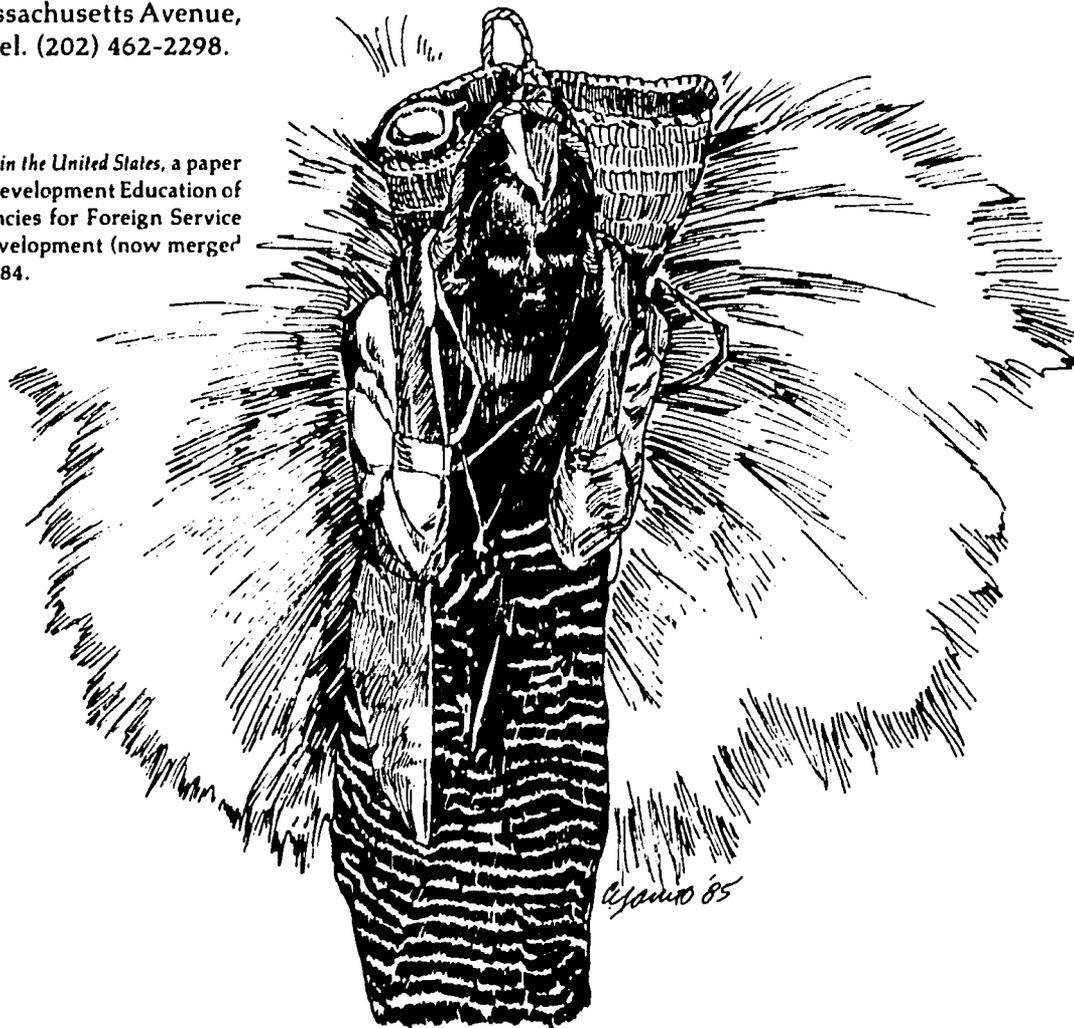
Earthscan, an international news and information service that is part of the International Institute for Environment and Development, focused its training on specialist journalists, those whose regular beat is agriculture or science and the environment. The train-



ing consisted of: one-day seminars featuring prominent experts as speakers and panelists; the seminars were designed to address the connections between domestic issues regularly covered by the reporters and comparable or related issues affecting the Third World. For example, a program in Chicago titled *The Third World and American Agriculture: Competing or Compatible Interests?* includes an address on the long- and short-range beneficiaries of agricultural development in the Third World and a panel discussing ways to minimize resource costs in feeding a world of 6 billion people. Following lunch with a speaker on the importance of Third World genetic resources to agriculture, representatives of two assistance agencies considered the 30-year history of U.S. food aid, where it succeeded and where it failed. Participants carried away a press packet of supplementary material and now regularly receive Earthscan's briefing documents on development issues. A number of articles under the bylines of participants appeared in Midwest press in the weeks following the seminar and substantial later ripple effects have been documented.

Earthscan publishes paperbacks and technical reports on Third World development and natural resources as well as a bimonthly newsletter. For a catalog, write Earthscan, 1717 Massachusetts Avenue, N.W., Washington, DC 20036, Tel. (202) 462-2298.

*From *A Framework for Development Education in the United States*, a paper prepared by the Joint Working Group on Development Education of the American Council of Voluntary Agencies for Foreign Service and Private Agencies in International Development (now merged and known as INTERACTION), April, 1984.



Appendix

Appendix Table 1.1 Basic Indicators for Developing Nations.

Countries	Population (millions) Mid-1981	Area (thousands of square kilometers)	GNP per Capita Dollar 1981	Adult literacy (percent) 1980	Life expectancy at birth (years) 1981	Percentage of labor force in Agriculture culture 1980
Low-Income Economies						
1. Kampuchea, Dem	—	181	—	—	—	—
2. Bhutan	1.3	47	80	—	45	93
3. Lao, PDR	3.5	237	80	44	43	75
4. Chad	4.5	1,284	110	15	43	85
5. Bangladesh	90.7	144	140	26	48	74
6. Ethiopia	32.0	1,222	140	15	46	80
7. Nepal	15.0	141	150	19	45	93
8. Burma	34.1	677	190	66	54	67
9. Afghanistan	16.3	648	—	20	37	79
10. Mali	6.9	1,240	190	10	45	73
11. Malawi	6.2	118	200	25	44	86
12. Zaire	29.8	2,345	210	55	50	75
13. Uganda	13.0	236	220	52	48	83
14. Burundi	4.2	28	230	25	45	84
15. Upper Volta	6.3	274	240	5	44	82
16. Rwanda	5.3	26	250	50	46	91
17. India	690.2	3,288	260	36	52	69
18. Somalia	4.4	638	280	60	39	82
19. Tanzania	19.1	945	280	79	52	83
20. Vietnam	55.7	330	—	87	63	71
21. China	991.3	9,561	300	69	67	69
22. Guinea	5.6	246	300	20	43	82
23. Haiti	5.1	28	300	23	54	74
24. Sri Lanka	15.0	66	300	85	69	54
25. Benin	3.6	113	320	28	50	46
26. Central African Republic	2.4	623	320	33	43	88
27. Sierra Leone	3.6	72	320	15	47	65
28. Madagascar	9.0	587	330	50	48	87
29. Niger	5.7	1,267	330	10	45	91
30. Pakistan	84.5	804	650	24	50	57
31. Mozambique	12.5	802	—	33	—	66
32. Sudan	19.2	2,506	380	32	47	72
33. Togo	2.7	57	380	18	48	67
34. Ghana	11.8	239	400	—	54	53
35. Kenya	17.4	583	420	47	56	78
36. Senegal	5.9	196	430	10	44	77
37. Mauritania	1.6	1,031	460	17	44	69
38. Yemen Arab Rep.	7.3	195	460	21	43	75
39. Yemen, PDR	2.0	333	460	40	46	45
40. Liberia	1.9	111	520	25	54	70
41. Indonesia	149.5	1,919	530	62	54	55
42. Lesotho	1.4	30	540	52	52	87
43. Bolivia	5.7	1,099	600	63	51	50
44. Honduras	3.8	112	600	60	59	63
45. Zambia	5.8	753	600	44	51	67
46. Egypt	43.3	1,001	650	44	57	50
47. El Salvador	4.7	21	650	62	63	50
48. Thailand	48.0	514	770	86	63	76
49. Philippines	49.6	300	790	75	63	46
50. Angola	7.8	1,247	—	—	42	59
51. Papua New Guinea	3.1	462	840	32	51	82
52. Morocco	20.9	447	860	28	57	52
53. Nicaragua	2.8	130	860	90	57	43
54. Nigeria	87.6	924	870	34	49	54
55. Zimbabwe	7.2	391	870	69	55	60
56. Cameroon	8.7	475	880	—	50	83
57. Cuba	9.7	115	—	95	73	23

Appendix Table 1.1. Basic Indicators For Developing Nations (continued).

Countries	Population (millions) Mid-1981	Area (thousands of square kilometers)	GNP per Capita Dollar 1981	Adult literacy (percent) 1980	Life expectancy at birth (years) 1981	Percentage of labor force in Agriculture culture 1980
Middle-Income Economies (based on GNP of 1000 to 3000)						
58. Congo, People's Rep.	1.7	342	1,110	—	60	34
59. Guatemala	5.7	109	1,140	—	59	55
60. Peru	17.0	1,285	1,170	80	58	39
61. Ecuador	8.6	284	1,180	81	62	52
62. Jamaica	2.2	11	1,180	90	71	21
63. Ivory Coast	8.5	322	1,200	35	47	79
64. Dominican Rep.	5.6	49	1,260	67	62	49
65. Monogolia	1.7	1,565	—	—	64	55
66. Colombia	26.4	1,139	1,380	81	63	26
67. Tunisia	6.5	164	1,420	62	61	35
68. Costa Rica	2.3	51	1,430	90	73	29
69. Korea, Dem. Rep.	18.7	121	—	—	66	49
70. Turkey	45.5	781	1,540	60	62	54
71. Syria Arab Rep.	9.3	185	1,570	58	65	33
72. Jordan	3.4	98	1,620	70	62	20
73. Paraguay	3.1	407	1,630	84	65	44
74. Korea, Rep. of	38.9	98	1,700	93	66	34
75. Iran, Islamic Rep. of	40.1	1,648	—	50	58	39
76. Iraq	13.5	435	—	—	57	42
77. Malaysia	1.2	330	1,840	60	65	50
78. Panama	1.9	77	1,910	85	71	27
79. Lebanon	2.7	10	—	—	66	11
80. Hungary	10.7	93	2,100	99	71	21
81. Algeria	19.6	2,382	2,140	35	56	25
82. Brazil	120.5	8,512	2,220	76	64	30
83. Mexico	71.2	1,973	2,250	83	66	33
84. Portugal	9.8	92	2,520	78	72	28
85. Romania	22.5	238	2,540	98	71	29
86. Argentina	28.2	2,767	2,560	93	71	13
87. Chile	11.3	757	2,560	—	68	19
88. South Africa	29.5	1,221	2,770	—	63	30
89. Yugoslavia	22.5	256	2,790	85	71	29
90. Uruguay	2.9	176	2,820	94	71	11
Upper-Income Economies (based on GNP of 3001 and up)						
91. Venezuela	15.4	912	4,220	82	68	18
92. Greece	9.7	132	4,420	—	74	37
93. Hong Kong	5.2	1	5,100	90	75	3
94. Israel	4.0	21	5,160	—	73	7
95. Ireland	3.4	70	5,230	98	73	18
96. Singapore	2.4	1	5,240	83	72	2
97. Spain	38.0	505	5,640	—	74	14
98. Trinidad & Tobago	1.2	5	5,670	95	72	10
99. Italy	56.2	301	6,960	98	74	11
100. New Zealand	3.3	269	7,700	99	74	9
102. United Kingdom	56.0	245	9,110	99	74	2
103. Japan	117.0	372	10,080	99	77	12
104. Austria	7.6	84	10,210	99	73	9
105. Canada	24.2	9,976	11,400	99	75	5
106. France	54.0	547	12,190	99	76	8
107. United States	229.8	9,363	12,820	99	75	2
108. German Fed. Rep.	61.7	249	13,450	99	73	4
109. Sweden	8.3	450	14,870	99	77	5
110. Switzerland	6.4	41	17,430	99	76	5

Countries not accounted for: Albania, Bulgaria, Poland, USSR, Czechoslovakia, and German Dem. Rep.
SOURCE: World Bank, World Development Report, 1983.

Appendix Table 1.2 Income Distribution in Selected Countries.

Country	Per Capita GNP in U.S. \$ (1970 prices)	% of income received by:		Gini concentration ratio*
		lowest 40%	highest 20%	
Developing countries				
Pakistan (1963-64)	94	6.5	45.5	.365
Tanzania (1967)	94	5.0	57.0	.458
Sri Lanka (1969-70)	109	6.0	46.0	.370
India (1963-64)	110	5.0	52.0	.418
Kenya (1969)	153	3.8	68.0	.550
Philippines (1965)	224	3.9	55.4	.465
Korea (1970)	269	7.0	45.0	.362
Tunisia (1970)	306	4.1	55.0	.473
Ivory Coast (1970)	329	3.9	57.2	.493
Taiwan (1968)	366	7.8	41.4	.325
Colombia (1970)	388	3.5	59.4	.507
Malaysia (1970)	401	3.4	55.9	.475
Brazil (1970)	457	3.1	62.2	.519
Peru (1970)	546	1.5	60.0	.557
Costa Rica (1971)	617	5.4	50.6	.419
Mexico (1969)	697	4.0	64.0	.526
Uruguay (1967)	721	4.3	47.4	.406
Chile (1968)	904	4.5	56.8	.463
Developed countries				
Japan (1968)	1,713	4.6	43.8	.372
France (1962)	2,303	1.9	53.7	.481
Norway (1963)	2,362	4.5	40.5	.346
United Kingdom (1968)	2,414	6.0	39.2	.322
New Zealand (1970-71)	2,502	4.4	41.0	.346
Australia (1967-68)	2,632	6.6	38.7	.310
West Germany (1970)	3,209	5.9	45.6	.378
Canada (1965)	3,510	6.4	40.2	.322
United States (1970)	5,244	6.7	38.8	.315
Socialist countries				
Yugoslavia (1968)	602	6.5	41.5	.337
Poland (Poland)	661	9.8	36.0	.265
Hungary (1967)	873	8.5	33.5	.249
East Germany (1970)	2,046	10.4	30.7	.213

*Measure of income concentration used in economic analysis. A value of zero would mean total equality.

Source: Montek S. Ahluwalia, "Inequality, Poverty and Development," *Journal of Development Economics* 3 (1976), 340-41.

Appendix Table 1.3 World Agriculture Demand in the Year 2000.

Region	Meat	Milk	Cereals	Oilseed	Fiber
North Africa/Mid East	13.2	43.0	142	10	1.7
Sub-Saharan	9.9	19.3	108	9	.8
European Community	25.4	111.0	133	44	1.2
Other Western Europe	7.3	26.3	58	10	.4
U.S.S.R.	24.3	118.3	306	20	3.6
Eastern Europe	14.8	56.7	139	17	1.2
South Asia	4.1	72.7	291	17	6.4
East Asia	18.7	15.1	224	23	3.5
China, Vietnam, Laos					
Kampuchea, North Korea	42.4	14.3	457	37	7.3
Oceania	3.2	8.8	16.2	.4	
Latin America	29.5	68.0	161	18	1.9
North America	33.9	79.1	254	43	1.5
World Total	226.7	632.5	2290	249	29.9
Growth from 1980	64%	36%	46%	62%	37%

Reproduced from: U.S. Department of Agriculture

Appendix Table 2.1 U.S. Foreign Cooperation Programs, Total and by Major Classifications (Gross Obligations in Current Dollars, Millions).

	1968-72 Average	1973-77 Average	1978-82 Average	1983 Estimate	1984 Proposal†
Economic Assistance					
P.L. 480	1,220	1,182	1,352	1,351	1,052
Economic Support Fund	548	1,154	2,254	2,977	2,949
Development Assistance	1,387	1,477	1,940	1,962	1,890
Contributions to MDBs	341	735	1,292	1,537	1,618
Contributions to International Organizations and Programs*	153	192	302	249	240
Other**	83	126	207	649	597
TOTAL	3,732	4,866	7,357	8,725	8,346
Military Assistance					
Concessional	3,078	2,206	904	1,604	1,808
Non-Concessional***	378	1,203	2,771	3,932	4,656
TOTAL	3,456	3,409	3,675	5,536	6,464
GRAND TOTAL	7,188	8,275	11,032	14,261	14,811

*Includes contribution to International Fund for Agricultural Development (IFAD).

**Includes, *inter alia*, Peace Corps, International Narcotics Control, Peacekeeping Operations, refugee assistance programs, and the operating budget for the Agency for International Development, trade and development programs, the Inter-America Foundation, the Africa Development Foundation and the Miscellaneous Trust Fund.

***Loans at U.S. Treasury cost-of-money interest rates for purchase of military equipment and services.

†Adjusted based on Appendix A & B, Commission on Security and Economic Assistance (Carlucci Report), 1983.

Source: 1968-82 inclusive, derived from annual data in *U.S. Overseas Loans and Grants* (Washington: AID, various years).

1983 AID Presentation to Office of Management and Budget (Washington: AID, October, 1982).

1984 Congressional Presentation, Fiscal Year 1984 (Washington: AID, 1983).

Reproduced herein from The Commission on Security and Economic Assistance (Carlucci Report).

Appendix Table 2.2 U.S. Foreign Cooperation Programs in Constant 1982 Dollars, Millions.

	1968-72 Average	1973-77 Average	1978-82 Average	1983 Estimate	1984 Proposal†
Economic Assistance					
P.L. 480	2,817	2,043	1,601	1,312	947
Economic Support Fund	1,260	1,905	2,647	2,826	2,669
Development Assistance	3,201	2,515	2,292	1,868	1,711
Contributions to MDBs	806	1,271	1,534	1,464	1,465
Contributions to International Organizations and Programs*	349	289	322	237	217
Other**	189	190	220	619	537
TOTAL	8,622	8,253	8,659	8,310	7,938
Military Assistance					
Concessional	7,007	4,070	1,050	1,527	1,636
Non-Concessional***	850	2,011	3,273	3,745	4,214
TOTAL	7,857	6,081	4,323	5,272	5,850
GRAND TOTAL	16,479	14,334	12,982	13,582	13,396

*Includes contribution to International Fund for Agricultural Development (IFAD).

**Includes, *inter alia*, Peace Corps, International Narcotics Control, Peacekeeping Operations, refugee assistance programs, and the operating budget for the Agency for International Development, trade and development programs, the Inter-America Foundation, the Africa Development Foundation and the Miscellaneous Trust Fund.

***Loans at U.S. Treasury cost-of-money interest rates for purchase of military equipment and services.

†Adjusted based on Appendix A & B, Commission on Security and Economic Assistance (Carlucci Report), 1983.

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1984 Congressional Presentation, Fiscal Year 1984 (Washington: AID, 1983).

Reproduced herein from The Commission on Security and Economic Assistance (Carlucci Report).

Appendix Table 2.3 Distribution of U.S. Foreign Assistance 1946-1983.

Area	Total Loans & Grants		Loans	Grants	E.A.	M.A.
European Nations	45,810.9		10,773.6	35,037.3	28,825.9	16,985.0
% of Total	17		23	77	63	37
Oceania & other	1,018.8		130.1	888.7	898.8	120.0
% of Total	1		13	87	88	12
Canada	30.5		17.5	13.0	17.5	13.0
% of Total	*		57	43	57	43
Africa	12,947.0		4,569.7	8,377.3	10,991.6	1,955.4
% of Total	5		35	65	85	15
East Asia	65,736.6		10,423.0	55,313.6	2,8018.1	37,718.5
% of Total	25		16	84	43	57
Latin America	17,604.5		9,758.9	7,845.6	14,926.4	2,678.1
% of Total	7		55	45	85	15
Near East & South Asia	83,990.3		42,545.8	4,144.5	47,081.8	36,908.5
% of Total	31		51	49	56	44
Interregional Activities	38,694.2		266.9	38,427.3	34,563.1	4,131.1
% of Total	14		1	99	89	11
TOTAL	265,832.8		78,485.5	187,347.3	165,323.2	100,509.6
% of Total	100		30	70	62	38

*Less than 1 percent

Source: U.S. Overseas Grants and Loans.

Appendix Table 2.4 Top 100 Nations Receiving U.S. Assistance.

Country	Total Amount 1946-83 (\$ millions)			31. Dominican Rep.	892.3	830.4	61.9
	Total Assistance	Economic	Military				
1. Israel	25,345.2	7,941.0	17,404.2	32. Sudan	847.5	636.6	210.9
2. Vietnam	23,362.9	6,946.8	16,416.1	33. Pacific Islands	824.2	824.2	—
3. Korea, Rep. of	14,200.5	6,041.0	8,159.5	34. Sri Lanka	731.3	725.2	6.1
4. Egypt	13,690.7	9,409.2	4,281.5	35. Ethiopia	678.0	397.8	280.2
5. India	10,975.0	10,828.5	146.5	36. Honduras	658.4	537.3	121.1
6. Turkey	10,216.2	3,780.3	6,435.9	37. Poland	646.9	646.9	—
7. Taiwan	6,567.3	2,206.9	4,360.4	38. Kenya	645.0	474.0	171.0
8. Pakistan	6,525.2	5,550.1	975.1	39. Ecuador	587.6	463.0	124.6
9. Greece	6,283.2	1,910.3	4,372.9	40. Syria	582.0	581.9	0.1
10. Japan	3,950.8	2,711.1	1,239.7	41. Costa Rica	559.7	546.0	13.7
11. Indonesia	3,642.0	3,103.8	538.2	42. Guatemala	551.5	510.0	41.5
12. Philippines	3,611.5	2,404.4	1,207.1	43. Liberia	545.4	492.8	52.6
13. Spain	3,234.3	1,096.0	2,138.3	44. Afghanistan	542.7	537.1	5.6
14. Brazil	3,068.4	2,428.4	640.0	45. Jamaica	512.2	504.0	8.2
15. Yugoslavia	2,832.3	2,109.1	723.1	46. Lebanon	499.9	251.7	248.2
16. Thailand	2,734.5	838.0	1,896.5	47. Panama	481.6	455.5	26.1
17. Jordan	2,617.2	1,468.2	1,149.0	48. Somalia	480.4	384.0	96.4
18. Laos	2,509.3	902.6	1,606.7	49. Argentina	462.9	199.3	263.6
19. Kampuchea	2,189.9	909.6	1,280.3	50. Ghana	442.6	440.6	2.0
20. Iran	2,170.4	765.6	1,404.8	51. Nicaragua	424.6	392.2	32.4
21. Bangladesh	1,856.0	1,854.9	1.1	52. Ryukyu Islands	413.7	413.7	—
22. Morocco	1,660.0	1,176.9	483.1	53. Nigeria	408.3	406.5	1.8
23. Columbia	1,627.5	1,374.8	252.7	54. Haiti	396.2	388.5	7.7
24. Portugal	1,624.6	908.1	716.5	55. Mexico	369.1	353.9	15.2
25. Chile	1,395.9	1,178.9	217.0	56. Venezuela	353.9	201.5	152.4
26. Tunisia	1,357.7	967.5	390.2	57. Tanzania	336.6	336.6	—
27. Peru	1,146.7	889.8	217.0	58. Saudi Arabia	234.2	31.8	292.4
28. El Salvador	1,028.3	806.7	221.6	59. Nepal	318.3	315.9	2.4
29. Bolivia	941.2	860.2	81.0	60. Zambia	267.8	267.8	—
30. Zaire	917.2	733.4	183.8	61. Malaysia	266.3	92.0	174.3
				62. Uruguay	250.6	161.3	89.3
				63. Burma	237.6	148.5	89.1
				64. Senegal	235.3	223.1	12.2
				65. Libya	230.1	212.5	17.6
				66. Paraguay	225.0	194.6	30.4
				67. Yemen Arab Rep.	219.3	196.9	22.4
				68. Algeria	203.3	203.3	—
				69. Upper Volta	197.7	197.1	0.6

Appendix Table 2.4 Top 100 Nations Receiving U.S. Assistance (continued).

Country	Total Amount 1946-83 (\$ millions)					
	Total Assistance	Economic	Military			
70. Zimbabwe	196.9	196.7	0.2			
71. Cyprus	193.3	193.3	—			
72. Czechoslovakia	193.0	193.0	—			
73. Mali	192.3	188.7	3.6			
74. Niger	185.9	178.4	7.5			
75. Guinea	185.5	184.5	1.0			
76. Botswana	170.4	164.0	6.4			
77. Cameroon	147.9	131.0	16.9			
78. Lesotho	141.4	141.4	—			
79. Guyana	112.7	112.6	0.1			
80. Sierra Leone	110.7	110.6	0.1			
81. Mauritania	100.6	100.5	0.1			
82. Iraq	95.5	45.5	50.0			
83. Malawi	90.8	90.5	0.3			
84. Malta	84.4	83.9	0.5			
85. Uganda	77.9	77.8	0.1			
86. Chad	76.5	76.5	—			
87. Mozambique	76.1	76.1	—			
88. Togo	75.4	75.2	0.2			
89. Swaziland	73.1	73.1	—			
90. Benin (Oahomey)	59.8	59.8	—			
91. Rwanda	56.3	54.6	1.7			
92. Cape Verde	54.8	54.8	—			
93. Madagascar	51.1	51.1	—			
94. Ivory Coast	47.9	47.6	0.3			
95. Burundi	45.6	45.5	0.1			
96. Hong Kong	43.8	43.8	—			
97. The Gambia	43.1	43.1	—			
98. Trinidad & Tobago	40.9	40.9	—			
99. Mauritius	40.8	40.8	—			
100. Ceto	39.6	39.6	—			

*Includes Economic Security Funds.

Source: U.S. Overseas Grants & Loans, USAID.

Appendix Table 2.5 Amount of U.S. Foreign Assistance Received by Nations by Class of Assistance and by GNP Rank, 1980-83.

GNP Rank	FA Rank	Country	Devel. Assist.	P.L. 480	ESF	Milit. Assist.	Other Econ. Assist.	Total Assist.	Percent of Total Assist.
1	18	Chad	3.1	9.4	2.8	0	0	15.3	.04
		% of Total	20.0	61.0	18.0			100	
2	12	Bangladesh	313.6	340.6	0	.6	0	654.8	2.00
		% of Total	47.0	52.0		1.0		100	
3	69	Ethiopia	0	25.3	0	0	0	25.3	.10
		% of Total		100				100	
4	44	Nepal	56.7	14.5	0	.3	6.6	78.1	.23
		% of Total	72.0	18.0		.3	8.0	100	
5	50	Mali	49.5	5.7	0	.4	5.5	60.9	.18
		% of Total	81.0	9.0		.6	9.0	100	
6	56	Burma	26.4	.2	0.4	20.3	20.3	47.3	.14
		% of Total	56.0	.49		1.0	43.0	100	
7	32	Zaire	37.3	50.7	5.0	34.5	15.9	143.4	.42
		% of Total	26.0	35.0	3.0	24.0	11.0	100	
8	65	Malawi	25.2	4.3	0	.3	2.7	32.5	.10
		% of Total	78.0	13.0		.09	8.0	100	
9	41	Upper Volta	34.8	41.3	0	.4	5.7	82.2	.24
		% of Total	42.0	50.0		.4	7.0	100	
10	67	Uganda	16.6	13.7	0	.2	0	30.5	.10
		% of Total	54.0	45.0		.6		100	
11	4	India	395.2	532.7	0	.5	0	928.4	3.00
		% of Total	43.0	57.0		.05		100	
12	66	Rwanda	17.1	11.7	0	1.7	.3	30.8	.10
		% of Total	55.0	38.0		5.0	1.0	100	
13	70	Burundi	18.2	8.8	0	0	.3	27.3	.10
		% of Total	67.0	32.0			1.0	100	
14	40	Tanzania	47.2	38.9	0	0	3.8	89.9	.30
		% of Total	52.0	43.0			4.0	100	
15	19	Somalia	65.7	138.1	46.0	96.4	0	346.2	1.00
		% of Total	19.0	40.0	13.0	28.0		100	
16	31	Haiti	48.6	81.0	11.0	1.7	1.6	143.9	.42
		% of Total	34.0	56.0	8.0	1.0	1.0	100	

Appendix Table 2.5 Amount of U.S. Foreign Assistance Received by Nations by Class of Assistance and by GNP Rank, 1980-83. (continued)

GNP Rank	FA Rank	Country	Devel. Assist.	P.L. 480	ESF	Milit. Assist.	Other Econ. Assist.	Total Assist.	Percent of Total Assist.
17	79	Benin % of Total	7.3 48.0	4.2 28.0	0	0	3.6 24.0	15.1 100	.04
18	85	Cen. African Rep. % of Total	1.0 13.0	1.1 15.0	0	0	5.4 72.0	7.5 100	.02
19	92	China % of Total	0	2.3 100.0	0	0	0	2.3 100	.006
20	61	Guinea % of Total	11.1 32.0	23.8 68.0	0	0	0	34.9 100	.10
21	43	Niger % of Total	52.2 66.0	5.3 7.0	5.0 6.0	7.4 9.0	9.6 12.0	79.5 100	.23
22	68	Madagascar % of Total	.4 1.0	29.7 99.0	0	0	0	30.1 100	.10
23	25	Sri Lanka % of Total	176.7 62.0	105.6 37.0	0	2.3 1.0	0	284.6 100	1.00
24	64	Togo % of Total	13.3 43.0	8.6 28.0	0	0	9.1 29.0	31.0 100	.10
25	45	Ghana % of Total	16.4 21.0	53.1 68.0	0	1.0 1.0	8.0 10.0	78.5 100	.23
26	5	Pakistan % of Total	0	307.7 35.0	300.0 34.0	261.4 30.0	6.6 1.0	875.7 100	3.00
27	22	Kenya % of Total	90.9 28.0	79.0 24.0	60.7 19.0	81.8 25.0	13.5 4.0	325.9 100	1.00
28	60	Sierra Leone % of Total	8.9 25.0	16.1 45.0	0	0	10.6 30.0	35.6 100	.10
29	9	Sudan % of Total	112.5 15.0	139.1 19.0	272.3 37.0	203.2 28.0	0	727.1 100	2.00
30	53	Mauritania % of Total	22.6 44.0	23.6 46.0	0	.1 .1	4.9 9.5	51.2 100	.15
31	*	Yemen, R.D.R.	0	0	0	0	0	0	0
32	27	Liberia % of Total	40.9 17.0	50.6 21.0	104.2 43.0	34.3 14.0	11.2 5.0	241.2 100	1.00
33	34	Senegal % of Total	55.1 43.0	58.6 46.0	5.0 4.0	1.1 1.0	7.8 6.0	127.6 100	.40
34	36	Yemen, Arab Rep. % of Total	82.4 75.0	2.2 2.0	0	20.5 19.0	4.4 4.0	109.5 100	.32
35	42	Lesotho % of Total	42.8 53.0	33.3 41.0	0	0	5.3 6.0	81.4 100	.24
36	35	Bolivia % of Total	20.3 16.0	99.9 79.0	0	.1 .29	5.4 4.8	125.9 100	.40
37	11	Indonesia % of Total	290.8 44.0	238.1 36.0	0	134.9 20.0	0	663.8 100	2.00
38	33	Zambia % of Total	.1 .07	51.8 39.0	80.1 61.0	0	0	132.0 100	.40
39	17	Honduras % of Total	133.9 31.0	39.0 11.0	92.8 25.0	92.4 25.0	10.5 3.0	368.6 100	1.10
40	2	Egypt % of Total	0	1151.8 16.0	3215.0 45.0	2780.9 39.0	0	7147.7 100	21.10
41	7	El Salvador % of Total	175.0 22.0	115.2 14.0	309.0 38.0	204.7 25.0	.9 .1	804.9 100	2.40
42	15	Thailand % of Total	91.2 23.0	0	14.8 4.0	268.9 68.0	19.6 5.0	394.5 100	1.20
43	96	Papua New Guinea % of Total	0	0	0	0	1.2 100.0	1.2 100	.003

Appendix Table 2.5 Amount of U.S. Foreign Assistance Received by Nations by Class of Assistance and by GNP Rank, 1980-83. (continued)

GNP Rank	FA Rank	Country	Devel. Assist.	P.L. 480	ESF	Milit. Assist.	Other Econ. Assist.	Total Assist.	Percent of Total Assist.
44	13	Philippines % of Total	154.4 24.0	66.2 10.0	150.0 23.0	253.7 39.0	20.2 3.0	644.5 100	2.00
45	29	Zimbabwe % of Total	0 0	6.8 4.0	182.9 96.0	.2 .1	0	189.9 100	.56
46	*	Nigeria	0	0	0	0	0	0	0
47	16	Morocco % of Total	44.1 11.0	145.5 37.0	0	192.7 49.0	10.1 3.0	392.4 100	1.16
48	48	Cameroon % of Total	48.4 67.0	5.6 8.0	0	9.6 13.0	9.0 12.0	72.6 100	.20
49	38	Nicaragua % of Total	20.8 20.0	19.6 19.0	62.8 60.0	0	1.7 9.0	104.9 100	.30
50	90	Ivory Coast % of Total	0	0	0	0	2.8 100.0	2.8 100	.01
51	46	Guatemala % of Total	37.4 48.0	21.8 28.0	10.0 13.0	0	8.0 10.0	77.2 100	.23
52	83	Congo, Rep. Of % of Total	4.2 54.0	3.5 45.0	0	.1 1.3	0	7.8 100	.023
53	24	Peru % of Total	124.5 42.0	147.6 49.0	0	17.2 6.0	9.5 3.0	298.8 100	1.00
54	26	Dominican Republic % of Total	97.6 37.0	82.9 32.0	49.0 19.0	19.0 7.0	10.3 4.0	258.8 100	1.00
55	20	Jamaica % of Total	66.7 20.0	64.7 19.0	190.9 57.0	7.3 2.0	7.9 2.0	337.5 100	1.00
56	20	Ecuador % of Total	59.6 61.0	7.4 8.0	0	17.2 18.0	12.8 13.0	97.0 100	.30
57	3	Turkey % of Total	0	.2 .1	983.0 44.0	1266.9 56.0	3.0 .1	1266.9 100	7.00
58	21	Tunisia % of Total	36.2 11.0	54.3 16.0	10.0 3.0	229.5 69.0	3.6 1.0	333.6 100	1.00
59	23	Costa Rica % of Total	63.8 21.0	49.5 16.0	177.0 58.0	6.7 2.0	2.8 2.0	303.8 100	1.00
60	54	Colombia % of Total	.3 .6	4.6 10.0	0	11.8 25.0	30.8 65.0	47.5 100	.14
61	75	Paraguay % of Total	3.3 19.0	1.2 7.0	0	.1 1.0	12.3 73.0	16.9 100	.05
62	89	Syrian Arab Rep. % of Total	0	3.0 100.0	0	0	0	3.0 100	.01
63	18	Jordan % of Total	0	4.7 1.0	114.0 32.0	233.3 66.0	0	352.0 100	1.00
64	59	Malaysia % of Total	0	0.6 1.0	0	32.8 84.0	5.7 15.0	39.1 100	.1
65	10	Korea, Rep. of % of Total	0	54.1 8.0	0	647.3 92.0	4.3 1.0	705.7 100	2.1
66	54	Paraguay % of Total	27.7 62.0	5.3 12.0	0	11.6 26.0	0	44.6 100	.13
67	64	Chile % of Total	0.1 0.3	16.0 50.0	0	0	15.7 49.0	31.8 100	.1
68	86	Brazil % of Total	0	2.4 52.0	0	0	2.2 48.0	4.6 100	.01
69	62	Mexico % of Total	0	0	0	0.4 1.0	34.1 99.0	34.5 100	.1
70	*	Hungary	0	0	0	0	0	0	
71	*	Algeria	0	0	0	0	0	0	

Appendix Table 2.5 Amount of U.S. Foreign Assistance Received by Nations by Class of Assistance and by GNP Rank, 1980-83. (continued)

GNP Rank	FA Rank	Country	Devel. Assist.	P.L. 480	ESF	Milit. Assist.	Other Econ. Assist.	Total Assist.	Percent of Total Assist.
72	14	Portugal	0	38.0	105.0	263.3	0	406.3	1.2
		% of Total		9.0	26.0	65.0		100	
73	101	Argentina	0	0	0	0	0.1	0.1	.0003
		% of Total					100.0	100	
74	*	Romania	0	0	0	0	0	0	
75	94	Uruguay	0	0	0	0.1	1.9	2.0	.019
		% of Total				5.9	95.0	100	
76	*	South Africa	0	0	0	0	0	0	
77	101	Yugoslavia	0	0	0	0.2	0	0.2	.0006
		% of Total				100.0		100	
78	98	Venezuela	0	0	0	0.1	0.4	0.5	.001
		% of Total				20.0	80.0	100	
79	4	Greece	0	0	0	888.2	0	888.2	3.0
		% of Total				100.0		100	
80	1	Israel	0	1.0	3140.0	5500.0	0	8641.0	25.5
		% of Total		0.01	36.0	67.0		100	
81	102	Singapore	0	0	0	0.1	0	0.1	.0003
		% of Total				100.0		100	
82	6	Spain	0	0	48.0	781.6	0	829.9	2.4
		% of Total			6.0	94.0		100	
83	30	Oman	0	0	35.0	110.2	1.9	147.1	.4
		% of Total			24.0	75.0	1.0	100	
84	47	Italy	73.1	0	0	0	0	73.1	.2
		% of Total	100.0					100	
85	99	Trinidad & Tobago	0	0	0	0	0.3	0.3	.001
		% of Total					100.0	100	
86	*	Austria	0	0	0	*	0	*	
		% of Total				100.0			
87	*	Finland	0	0	0	*	0	*	
		% of Total				100.0			
OTHERS WITHOUT GNP RANK									
		Angola	0	13.4	0	0	0	13.4	.04
		% of Total		100.0				100	
		Barbados	0	0.2	0	0.3	0.4	0.9	.005
		% of Total		22.0		33.0	44.0	100	
		Belize	6.7	0	10.0	0.1	3.8	20.6	.1
		% of Total	32.0	0	48.0	0.49	18.0	100	
		Bhutan	0	2.4	0	0	0	0.24	.01
		% of Total		100.0				100	
		Botswana	0.4	15.3	44.9	6.4	5.5	72.5	.2
		% of Total	0.05	21.0	62.0	9.0	8.0	100	
		Cape Verde	12.4	10.9	0	0	0	23.3	.04
		% of Total	53.0	47.0				100	
		Comoros	0	1.8	0	0	0	1.8	.005
		% of Total		100.0				100	
		Cyprus	0	0.2	59.0	0	0	59.2	.2
		% of Total		0.39	99.7			100	
		Djibouti	3.3	5.0	6.0	1.7	0	16.0	.05
		% of Total	20.0	31.0	37.0	11.0		100	
		Equatorial Guinea	3.0	0.4	0	0.1	0	3.5	.01
		% of Total	86.0	11.0		3.0		100	
		Guinea-Bissau	8.0	8.2	0	0	0	16.2	.05
		% of Total	49.0	51.0				100	

Guyana	5.5	2.5	0	*	0.2	8.2	.03
% of Total	67.0	33.0			2.0	100	
(The) Gambia	15.4	4.7	0	0	3.2	23.3	.07
% of Total	66.0	20.0			14.0	100	
Kampuchea	0	58.3	0	0	0	58.3	.2
% of Total		100.0				100	
Lebanon	45.6	2.2	20.1	155.0	0	222.9	.5
% of Total	20.0	19.0	9.0	69.0		100	
Mauritius	0.3	16.4	4.0	0	0	20.7	.06
% of Total	1.0	79.0	19.0			100	
Mozambique	0	37.9	0	0	0	37.9	.11
% of Total		100.0				100	
Poland	0	102.9	5.0	0	0	107.9	.31
% of Total		95.0	5.0			100	
Sao Tome & Principe	1.6	0.6	0	0	0	2.2	.007
% of Total	73.0	27.0				100	
Seychelles	1.1	1.3	4.0	0	0.6	7.0	.02
% of Total	16.0	19.0	57.0		8.0	100	
Suriname	0	0	0.5	0	0.1	0.6	.002
% of Total			83.0		17.0	100	

Appendix Table 2.6 All Nations Receiving U.S. Foreign Assistance, by Region and Kind, 1946-83 (millions).

Region	Total Assistance	Economic*	Military
Near East & South Asia			
1. Afghanistan	542.7	537.1	5.6
2. Bahrain	2.4	2.4	—
3. Bangladesh	1,856.0	1,854.9	1.1
4. Bhutan	2.5	2.5	—
5. Cyprus	193.3	193.3	—
6. Egypt	13,690.7	9,409.2	4,281.5
7. Greece	6,283.2	1,910.3	4,372.9
8. India	10,975.0	10,828.5	146.5
9. Iran	2,100.4	765.6	1,404.8
10. Iraq	95.5	45.5	50.0
11. Israel	25,345.2	7,941.0	17,404.2
12. Jordan	2,617.2	1,468.2	1,149.0
13. Lebanon	499.9	251.7	248.2
14. Nepal	318.3	315.9	2.4
16. Pakistan	6,525.2	5,550.1	975.1
17. Saudi Arabia	324.2	31.8	292.4
18. Sri Lanka	731.1	725.2	6.1
19. Syria	582.0	581.9	.1
20. Turkey	10,216.2	3,780.3	6,435.9
21. Yemen Arab Rep.	219.3	196.9	22.4
22. Yemen, Peoples Dem. Rep.	4.5	4.5	—
23. Ceylon	39.6	39.6	—
Regional Spending	607.0	607.0	—
Latin America			
24. Argentina	462.9	199.3	263.6
25. Bahamas	.3	.3	—
26. Barbados	3.9	3.7	.2
27. Belize	30.1	30.0	.1
28. Bolivia	941.2	860.2	81.0
29. Brazil	3,068.4	2,428.4	640.0
30. Chile	1,395.9	1,178.9	217.0
31. Colombia	1,627.5	1,374.8	252.7
32. Costa Rica	559.7	546.0	13.7
33. Cuba	20.1	4.0	16.1
34. Dominican Republic	892.3	830.4	61.9
35. Ecuador	587.6	463.0	124.6
36. El Salvador	1,028.3	806.7	221.6
37. Guatemala	551.5	510.0	41.5
38. Guyana	112.7	112.6	.1

Appendix Table 2.6 All Nations Receiving U.S. Foreign Assistance, by Region and Kind, 1946-83 (millions) (continued).

Region	Total Assistance	Economic*	Military
39. Haiti	396.2	388.5	7.7
40. Honduras	658.4	537.3	121.1
41. Jamaica	512.2	504.0	8.2
42. Mexico	369.1	353.9	15.2
43. Nicaragua	424.6	392.2	32.4
44. Panama	481.6	455.5	26.1
45. Paraguay	225.0	194.6	30.4
46. Peru	1,146.7	889.8	256.9
47. Suriname	6.5	6.4	.1
48. Trinidad & Tobago	40.9	40.9	—
49. Uruguay	250.6	161.3	89.3
50. Venezuela	353.9	201.5	152.4
Regional Spending	1,457.3	1,452.9	4.4
East Asia			
51. Burma	137.6	148.5	89.1
52. China	2.3	2.3	—
53. Hong Kong	43.8	43.8	—
54. Indonesia	3,642.0	3,103.8	538.2
55. Japan (zero/recent yrs)	3,957.8	2,711.1	1,239.7
56. Kampuchea	2,189.9	909.9	1,280.3
57. Korea, Rep. of	14,200.5	6,041.0	8,159.5
58. Laos	2,509.3	902.6	1,606.7
59. Malaysia	266.3	92.0	174.3
60. Philippines	3,611.5	2,404.4	1,207.1
61. Ryukyu Islands	413.7	413.7	—
62. Singapore	22.0	2.8	19.2
63. Thailand	2,734.5	838.0	1,896.5
64. Vietnam	23,362.9	6,946.8	16,416.1
65. Western Samoa	12.4	12.4	—
66. Taiwan	6,567.3	2,206.9	4,360.4
Regional Spending	414.7	414.7	—

Appendix Table 2.6 All Nations Receiving U.S. Foreign Assistance, by Region and Kind, 1946-83 (millions) (continued).

Region	Total Assistance	Economic*	Military
Africa			
67. Algeria	203.3	203.3	—
68. Angola	16.1	16.1	—
69. Benin	59.9	59.8	.1
70. Botswana	170.4	164.0	6.4
71. Burundi	45.6	45.5	.1
72. Cameroon	147.9	131.0	16.9
73. Cape Verde	54.8	54.8	—
74. Central African Rep.	21.9	21.8	.1
75. Chad	76.5	76.5	—
76. Comoros	1.8	1.8	—
77. Congo, Rep. of	17.2	17.1	.1
78. Djibouti	18.8	17.1	1.7
79. Entente States	38.3	38.3	—
80. Equatorial Guinea, Rep. of	3.5	3.4	.1
81. Ethiopia	678.0	397.8	280.2
82. Gabon	28.7	16.2	12.5
83. Gambia, The	43.1	43.1	—
84. Ghana	442.6	440.6	2.0
85. Guinea	185.5	184.5	1.0
86. Guinea Bissau	27.4	27.4	—
87. Ivory Coast	47.9	47.6	.3
88. Kenya	645.0	474.0	171.0
89. Lesotho	141.4	141.4	—
90. Liberia	545.4	492.8	52.6
91. Libya	230.1	212.5	17.6
92. Madagascar	51.5	51.5	—
93. Malawi	90.8	90.5	.3
94. Mali	192.3	188.7	3.6
95. Mauritania	100.6	100.5	.1
96. Mauritius	40.8	40.8	—
97. Morocco	1,660.0	1,176.9	483.1
98. Mozambique	76.1	76.1	—
99. Niger	185.9	178.4	7.5
100. Nigeria	408.3	406.5	1.8
101. Rwanda	56.3	54.6	1.7
102. Sao Tome & Principe	2.6	2.6	—
103. Senegal	235.3	223.1	12.2
104. Seychelles	9.1	9.1	—
105. Sierra Leone	110.7	110.6	.1
106. Somalia	480.4	384.0	96.4
107. South Africa, Rep. of	1.3	1.3	—
108. Sudan	847.5	636.6	210.9
109. Swaziland	73.1	73.1	—
110. Tanzania	336.6	336.6	—
111. Togo	75.4	75.2	.2
112. Tunisia	1,357.7	967.5	390.2
113. Uganda	77.9	77.8	.1
114. Upper Volta	197.7	197.1	.6
115. Zaire	917.2	733.4	183.8
116. Zambia	267.8	267.8	—
117. Zimbabwe	196.9	196.7	.2
Regional Spending	1,010.7	1,010.7	—

Appendix Table 2.6 All Nations Receiving U.S. Foreign Assistance, by Region and Kind, 1946-83 (millions) (continued).

Region	Total Assistance	Economic*	Military
Europe			
118. Albania	20.4	20.4	—
119. Austria	1,257.0	1,135.2	121.8
120. Belgium/Luxembourg	1,867.5	592.3	1,275.2
121. Czechoslovakia	193.0	193.0	—
122. Denmark	922.0	281.9	640.1
123. Finland	57.2	56.8	.4
124. France	8,466.7	3,918.1	4,548.6
125. Germany, Dem. Rep.	8	.8	—
126. Germany, Fed. Rep.	4,980.5	4,041.1	939.4
127. West Berlin	131.9	131.9	—
128. Hungary	32.7	32.7	—
129. Iceland	82.3	82.2	.1
130. Ireland	146.5	146.5	—
131. Italy	5,954.2	3,408.9	2,545.3
132. Malta	84.4	83.9	.5
133. Netherlands	2,312.3	1,027.6	1,284.7
134. Norway	199.0	—	199.0
135. Poland	646.9	646.9	—
136. Portugal	1,624.6	908.1	716.5
137. Romania	22.4	22.4	—
138. Spain	3,234.3	1,096.0	2,138.3
139. Sweden	109.0	109.0	—
140. United Kingdom	8,779.6	7,672.1	1,107.5
141. U.S.S.R.	186.4	186.4	—
142. Yugoslavia	2,832.2	2,109.1	723.0
Regional Spending	619.0	619.0	—
Oceania & Others			
143. Australia	90.6	—	90.6
144. New Zealand	8.6	4.3	4.3
145. Pacific Islands	824.2	824.2	—
146. Papua New Guinea	1.6	1.5	.1
Regional Spending	61.0	60.9	.1
147. Canada	30.5	17.5	13.0
Interregional Activities	38,694.2	34,563.1	4,131.1

*Includes Economic Security Funds.

Source: U.S. Overseas Grants and Loans, USAID.

Appendix Table 2.7 Loans, Grants, and Repayments of Foreign Assistance, 1946-83.

GNP Rank	Country	Total Loans & Grants	Total Loans (\$ millions)	Repayments and Interest	Loans Less Repayments*
1.	Chad	76.5	0	0	0
2.	Bangladesh	1856.0	769.0	127.0	642.0
3.	Ethiopia	678.0	179.2	91.2	88.0
4.	Nepal	318.0	7.6	3.3	4.3
5.	Mali	192.3	6.8	1.5	5.3
6.	Burma	237.6	40.4	64.8	24.4
7.	Zaire	917.2	458.0	153.5	324.6
8.	Malawi	90.3	33.1	5.7	27.4
9.	Upper Volta	197.7	0	0	0
10.	Uganda	77.9	11.6	3.5	8.1
11.	India	10975.0	7517.8	5251.5	2266.3
12.	Rwanda	56.3	1.5	.4	1.1
13.	Burundi	45.6	0	0	0
14.	Tanzania	336.6	93.5	22.8	70.7
15.	Somalia	480.4	158.9	17.6	141.3
16.	Haiti	396.2	101.0	14.4	86.6
17.	Benin	59.9	23.7	2.9	20.8
18.	Central African Rep.	21.9	0	0	0
19.	China	2.3	0	0	0
20.	Guinea	185.5	105.8	36.3	69.5
21.	Niger	185.9	9.0	1.6	7.4
22.	Madagascar	51.5	12.6	2.2	20.4
23.	Sri Lanka	731.3	554.0	105.5	448.5
24.	Togo	75.4	0	0	0
25.	Ghana	442.6	275.9	149.4	126.5
26.	Pakistan	6525.2	3686.5	1274.2	2412.3
27.	Kenya	645.0	328.4	106.2	222.2
28.	Sierra Leone	110.7	16.7	4.5	12.2
29.	Sudan	847.5	242.7	44.6	198.1
30.	Mauritania	100.6	1.4	2.2	-0.8
31.	Yemen, PDR	4.5	0	0	0
32.	Liberia	545.4	195.0	40.1	154.9
33.	Senegal	235.3	9.6	7.1	2.5
34.	Yemen, Arab Rep.	219.3	20.4	0.2	20.2
35.	Lesotho	141.4	0	0	0
36.	Bolivia	941.2	436.6	152.0	284.6
37.	Indonesia	3642.0	2682.0	836.5	1845.5
38.	Zambia	267.8	277.5	44.9	182.6
39.	Honduras	658.4	364.5	69.3	295.2
40.	Egypt	13690.7	8696.7	1453.2	7243.5
41.	El Salvador	1028.3	459.5	65.3	394.2
42.	Thailand	2734.5	537.3	239.5	297.8
43.	Papua, New Guinea	1.6	0	0	0
44.	Philippines	3611.5	970.7	428.4	542.3
45.	Zimbabwe	196.9	5.0	7.7	-2.7
46.	Nigeria	408.3	83.9	31.7	52.2
47.	Morocco	1660.0	1004.4	661.3	343.1
48.	Cameroon	147.9	58.7	18.7	40.0
49.	Nicaragua	424.6	264.7	51.3	213.4
50.	Ivory Coast	47.9	14.3	9.6	4.7
51.	Guatemala	551.5	209.4	69.5	139.5
52.	Congo, Rep. of	17.2	1.9	-	1.9
53.	Peru	1146.7	610.6	285.2	325.4
54.	Dominican Rep.	892.3	519.5	167.6	351.9
55.	Jamaica	512.7	401.5	35.1	366.4
56.	Ecuador	587.6	236.5	166.5	70.0
57.	Turkey	10216.2	3779.0	1551.1	2227.9
58.	Tunisia	1337.7	761.4	350.7	410.7
59.	Costa Rica	559.7	361.3	52.0	309.3
60.	Colombia	1627.5	1104.1	605.0	499.1
61.	Paraguay	225.0	89.7	52.5	28.9
62.	Syria	582.0	494.2	62.3	431.9
63.	Jordan	2617.2	120.4	421.6	498.8
64.	Malaysia	266.3	187.1	169.7	17.4
65.	Korea	14200.5	3207.8	1758.1	1449.7

Appendix Table 2.7 Loans, Grants, and Repayments of Foreign Assistance, 1946-83.

GNP Rank	Country	Total Loans & Grants	Total Loans (\$ millions)	Repayments and Interest	Loans Less Repayments*
66.	Panama	481.6	265.1	90.0	175.1
67.	Chile	1359.9	917.7	584.7	333.0
68.	Brazil	3068.4	1990.3	1032.9	957.4
69.	Mexico	369.1	123.6	118.5	5.1
70.	Hungary	32.7	15.9	21.8	-5.9
71.	Algeria	203.3	11.6	14.2	-2.6
72.	Portugal	1624.6	789.5	401.6	387.9
73.	Argentina	462.9	357.1	338.4	18.7
74.	Romania	22.4	0	0	0
75.	Uruguay	250.6	147.1	91.7	55.4
76.	South Africa	1.3	1.3	1.3	0
77.	Yugoslavia	2832.2	922.0	788.9	133.1
78.	Venezuela	353.9	252.5	292.3	-39.8
79.	Greece	6283.2	2085.5	1256.5	829.0
80.	Israel	25345.2	12433.8	5051.3	7382.5
81.	Ireland	146.5	128.2	173.0	-44.8
82.	Hong Kong	43.8	0	0	0
83.	Spain	3234.3	1464.1	682.9	781.2
84.	Singapore	22.0	17.2	8.5	8.7
85.	Oman	149.2	130.0	30.5	99.5
86.	Trinidad/Tobago	40.9	0	0	0
87.	Italy	5954.2	401.2	486.7	-85.5
88.	New Zealand	8.6	5.8	5.8	0
89.	Libya	230.1	7.0	8.4	-1.4
90.	United Kingdom	8779.6	4213.3	3226.0	987.3
91.	Austria	1257.0	52.9	54.3	-1.4
92.	Japan	3950.8	964.3	1060.5	-96.2
93.	Belgium	1867.5	106.8	139.5	-32.7
94.	Finland	57.2	52.8	56.6	-3.8
95.	Netherlands	2312.3	188.8	239.9	-51.1
96.	Australia	123.6	123.4	127.9	-4.5
97.	Canada	30.5	17.5	15.5	-1.3
98.	France	8466.7	706.9	867.2	-160.3
99.	Germany, Fed. Rep.	.8	0	0	0
100.	Denmark	922.0	34.3	45.9	-11.6
101.	Sweden	109.0	22.0	27.0	-5.0
102.	Norway	1245.7	63.4	81.0	-17.6
103.	Saudi Arabia	324.2	258.5	257.1	1.1
	Total	177552.3	72881.7	35032.8	37859.5
	All Countries and Regions	265,832.0	78,485.0	39,540.0	38,945.0

*A negative balance in this column denotes loans has been repaid. Amount shown in column represents interest paid on loan.
Source: U.S. Overseas Grants and Loans, USAID.

Appendix Table 2.8 A.I.D. Program and Budget Process.

Key steps in this process include:

- At regular intervals, a Mission drafts a Country Development Strategy Statement (CDSS) which analyzes the country's economic situation and development programs, and describes A.I.D. goals and strategy.
- In the *Annual Budget Submission (ABS)*, the Mission lists projects in order of priority, with funding required, and includes descriptions of proposed new projects.
- A.I.D. regional and central bureaus review the ABS, and recommend bureau programs and levels to the Bureau for Policy and Program Coordination (PPC).
- PPC drafts a proposed A.I.D. program and funding levels.
- The A.I.D. Administrator decides differences between PPC and bureaus.
- The State Department reviews A.I.D. program and levels of funding.
- State and A.I.D. submit their views (if different) to the Office of Management and Budget (OMB) in the White House.
- OMB reviews A.I.D. program and levels.
- The President submits the budget for the entire U.S. Government to Congress.
- A.I.D. submits a justification (Congressional Presentation) to Congress of its program and budget, and testifies in hearings.
- EITHER Congress passes a bill which determines the amount of funds available for obligation in the budget year,
OR Congress fails to complete action and passes a "continuing resolution" allowing for funding of existing programs (but no new programs) at the previous year's level.

About 16 months will have elapsed from the time a Mission includes a proposed project in an ABS, to the beginning of the initial year for which Congress has approved funding. Typically, several months of consultation between the Mission and the Government of the country where it is working will precede the preparation of the ABS.

Note that new projects originate as proposals from A.I.D. country missions (unless they are worldwide or regional in scope); and their final approval depends on their consistency with the program approved by Congress.

Following project approval, A.I.D. solicits proposals for carrying out the project. A.I.D. and the host nation selects the contractor, negotiates an agreement—and implementation begins.

Source: Reproduced from "U.S. Foreign Assistance, A.I.D. and BIFAD—An Introduction," BIFAD Staff Paper by John Rothberg, 1984.

Appendix Table 3.1 U.S. Imports of Selected Metals and Minerals, 1981 (percentage of total imports).

	Imports from Developing Countries (%)	Imports from Developed Countries	Import Reliance (%)	Principal supplies with Percentage of U.S. Imports Supplied by Each	
Strontium**	100	—	100	Mexico, 99%	
Tin***	97.3	2.7	80	Malaysia, 44% Bolivia, 17%	Thailand, 20% Indonesia, 10%
Columbium	91.7	8.3	100	Brazil, 84% Nigeria, 7%	Canada, 8%
Graphite	88.6	11.4	100	Mexico, 57% China, 10%	Brazil, 10%
Chromium	83.9	16.1	90	South Africa, 34% Yugoslavia, 8%	Zimbabwe, 9%
Antimony	83.9	16.1	51	Bolivia, 35% France, 9%	China, 12%
Bauxite**	82.0	18.0	94	Jamaica, 36% Australia, 18%	Guinea, 22%
Petroleum	85.3	14.7	31	Saudi Arabia, 25% Mexico, 11%	Nigeria, 14% United Kingdom, 8%
Manganese**	76.2	23.8	98	South Africa, 33% France, 17%	Australia, 17% Gabon, 12%
Tungsten**	70.7	29.3	53	Canada, 26% China, 18%	Bolivia, 25% Thailand, 9%
Platinum Group Metals	63.2	36.8	85	South Africa, 57% United Kingdom, 11%	U.S.S.R., 13%
Cobalt	45.0	55.0	91	Zaire, 27% Norway, 10%	Canada, 12%
Copper**	50.9	49.1	14	Canada, 28% Japan, 20% Peru, 10%	Chile, 23% Zambia, 12%
Silver**	49.1	50.4	7	Canada, 39% Mexico, 19%	Peru, 23%
Nickel	31.9	68.1	72	Canada, 38% Philippines, 5%	Norway, 11%
Iron Ore**	30.8	69.2	28	Canada, 69% Brazil, 8%	Venezuela, 14%
Vanadium	23.1	76.9	42	Canada, 26% South Africa, 18%	Germany, Fed., 20%
Zinc**	19.4	80.6	60	Canada, 66% Australia, 6%	Peru, 7% Mexico, 6%

*Import reliance = net import reliance as a percentage of apparent consumption. (Net import reliance = imports - exports + adjustments for government and industry stock changes. Apparent consumption = U.S. primary and secondary production [i.e., from scrap and waste] + net import reliance.)

**1980 figures.

***1979 figures.

Sources: CDC table based on U.S. DOE, Petroleum Supply Annual 1981, Vol. 1; U.S. Department of the Interior, Mineral Commodity Summaries 1982; and additional data supplied by the Department of the Interior, reproduced here from Overseas Development Council (CDC), Agenda 1983.

Appendix Table 3.2 Export Dependency on Primary Commodities for Selected Developing Nations, 1975-77 (average).

(In % of total export earnings)

Over 90 percent		60 to 70 percent	
1. Lesotho*	Wool 90%, Wheat 10%	1. Colombia*	Coffee 57%
2. Zimbabwe*	Tobacco 59%, Sugar 18%, Cotton 13%	2. El Salvador*	Coffee 52%, Cotton 10%
3. Burundi*	Coffee 94%	3. Fiji*	Sugar 64%
5. Zambia*	Copper 92%	4. Nepal*	Rice 56%
6. Uganda*	Coffee 84%	5. Cameroon	Coffee 29%, Cocoa 22%, Timber 10%
7. Namibia*	Copper 65%, Lead 14%, Zinc 13%	6. Chile*	Copper 56%
8. Kiribati*	Phosphate 95%	7. Papua New Guinea	Copper 32%, Coffee 14%
9. Zaire*	Copper 64%, Coffee 18%	8. Solomon Island	Timber 30%, Copra 29%
10. Liberia*	Iron Ore 71%, Rubber 12%	9. Nicaragua	Cotton 24%, Coffee 23%
11. Mauritania	Iron Ore 87%	10. Tanzania	Coffee 33%, Cotton 14%
12. Gambia*	Groundnuts 56%, Groundnut oil 34%	11. Costa Rica	Coffee 29%, Bananas, 21%
		12. Yemen Arab Rep.	Cotton 41%, Coffee 22%
		13. Guatemala	Coffee 35%, Sugar 12%, Cotton 10%
80 to 90 percent		14. Mali	Cotton 45%, Groundnuts 10%
1. Malawi	Tobacco 47%, Tea 20%, Sugar 11%	15. Philippines	Sugar 19%, Coconut Oil 12%
2. Swaziland*	Sugar 62%, Iron Ore 14%		
3. Togo*	Phosphate 56%, Cocoa 17%, Coffee 11%	50 to 60 percent	
4. Rwanda*	Coffee 68%	1. Martinique*	Bananas 57%
5. Guinea-Bissau*	Groundnuts 78%	2. Madagascar	Coffee 46%
6. Reunion*	Sugar 82%	3. New Hebrides	Copra 43%
7. Ghana*	Cocoa 68%, Timber 11%	4. Haiti	Coffee 36%, Bauxite 14%
8. Guinea*	Bauxite 76%	5. Senegal	Groundnut Oil 35%, Phosphate 15%
9. Peru	Copper 19%, Fishmeal 13%	6. Kenya	Coffee 35%, Tea 13%
		7. Thailand	Rice 16%, Sugar 11%
70 to 80 percent		8. Benin	Cotton 29%
1. Guadeloupe	Bananas 42%, Sugar 37%	9. Morocco	Phosphate 45%
2. Guyana	Sugar 38%, Bauxite 30%, Rice 10%	10. Chad	Cotton 46%
3. Burma	Rice 46%, Timber 20%		
4. Equatorial Guinea	Coffee 43%, Cotton 24%		
5. Mauritius*	Sugar 73%		
6. Ivory Coast	Coffee 33%, Cocoa 19%, Timber 17%		
7. Honduras	Bananas 25%, Coffee 22%, Timber 11%		
8. Sudan*	Cotton 51%, Groundnuts 18%		
9. Belize*	Sugar 65%		
10. Sri Lanka*	Tea 51%, Rubber 17%		
11. Central Africa Empire	Coffee 34%, Timber 21%, Cotton 14%		
12. Dominican Republic	Sugar 43%, Coffee 13%		
13. Ethiopia*	Coffee 56%, Hides/Skins 10%		

*heavy dependent on a single commodity; a includes Nauru, Christmas Island, Ocean Island.

Source: World Bank, Commodity Trade and Price Trends, 1979 Edition. Reproduced here from Presidential Commission Report on World Hunger, 1980.

Appendix Table 3.3 Major Primary Commodity Exports of Developing Market Economies, 1978-80 and 1980 Averages.

Major Exports	Developing Market-Economy Exports 1978-80 Average ¹ (\$ millions)	Developing Market-Economy Exports, 1980 ² (\$ millions)	(% of world exports)	Major Suppliers 1978-1980	
Petroleum	212,294	295,483	87	Saudi Arabia, 27% Nigeria, 7%	Iraq, 8% Iran, 7%
Coffee	11,063	11,643	92	Colombia, 18% Ivory Coast, 6%	Brazil, 18% Indonesia, 5%
Copper	5,529	6,779	62	Chile, 18% Zaire, 9%	Zambia, 12% Peru, 7%
Timber	5,516	6,333	30	Malaysia, 9% Ivory Coast, 2%	Indonesia, 8% Yugoslavia, 2%
Rubber	3,763	4,325	99	Malaysia, 50% Thailand, 14%	Indonesia, 25% Sri Lanka, 4%
Sugar	3,672	5,716	35	Brazil, 6% Mauritania, 2%	Philippines, 3% Dominican Rep., 2%
Cotton	3,185	3,543	46	Egypt, 6% Sudan, 4%	Mexico, 5% Syria, 3%
Cocoa	2,970	2,822	95	Ghana, 22% Nigeria, 16%	Ivory Coast, 21% Brazil, 13%
Iron Ore	2,702	3,192	43	Brazil, 21% India, 5%	Liberia, 5% Venezuela, 2%
Tin	2,158	2,380	81	Malaysia, 33% Indonesia, 15%	Thailand, 17% Bolivia, 11%
Rice	1,812	2,160	43	Thailand, 18% Burma, 3%	Pakistan, 8% India, 3%
Tobacco	1,707	1,839	45	Brazil, 7% Zimbabwe, 4%	Turkey, 6% India, 4%
Tea	1,394	1,442	77	India, 26% Kenya, 10%	Sri Lanka, 21% Indonesia, 5%
Maize	1,335	1,521	14	Argentina, 6% Yugoslavia, 1%	Thailand, 3%
Phosphate Rock	1,206	1,522	65	Morocco, 34% Togo, 6%	Jordan, 6% Senegal, 3%

¹Ranked by average value of exports in 1978-1980 period.

²World exports of commodities (on which percentages are based) include the Soviet Union and Eastern European countries.

Notes: Exports are f.o.b. (free on board) values. Unless otherwise indicated, the data do not include exports of Asian centrally planned economies (except Vietnam), Cuba, Hong Kong, or Singapore.

Source: World Bank, Commodity Trade and Price Trends (1982), Tables 7, 10, and 11. Reproduced here from ODC, Agenda 1983.

Appendix Table 3.4 Twenty Largest U.S. Trading Partners, 1981 (\$ billions).

	Total Transactions	Exports	Imports
Canada	\$ 86.0	\$ 39.6	\$ 46.4
Japan	59.4	21.8	37.6
Mexico	31.6	17.8	13.8
United Kingdom	25.2	12.4	12.8
Saudi Arabia	21.7	7.3	14.4
Germany, Fed. Rep.	21.7	10.3	11.4
France	13.2	7.3	5.9
Taiwan	12.3	4.3	8.0
Venezuela	11.0	5.4	5.6
Netherlands	11.0	8.6	2.4
Nigeria	10.7	1.5	9.2
Italy	10.6	5.4	5.2
Korea, Rep.	10.2	5.1	5.1
Brazil	8.3	3.8	4.5
Belgium/Luxembourg	8.1	5.8	2.3
Hong Kong	8.0	2.6	5.4
Australia	7.7	5.2	2.5
Indonesia	7.3	1.3	6.0
Libya	6.1	0.8	5.3
Algeria	5.7	0.7	5.0
TOTAL, 20 Countries	\$375.8	\$167.0	\$208.8
TOTAL, 11 Developing Countries	132.9	50.6	82.3
TOTAL U.S. Trade	\$495.0	\$233.7	\$261.3
11 Developing Countries as % of Total U.S. Trade	26.8%	21.7%	31.5%

Note: All figures are f.a.s. (free alongside ship) transaction values.

Source: ODC table based on U.S. DOC. *Highlights of U.S. Trade* (Dec. 1981), tables E-3 and I-6. Reproduced here from ODC, Agenda 1983.

Appendix Table 3.5 Ten Largest Developing-Country Markets for U.S. Exports (\$ billions and percentages).

	1975		1981		1975-1981 Average Annual Growth in U.S. Exports*
	U.S. Exports	Share of U.S. Exports of Developing Countries	U.S. Exports	Share of U.S. Exports of Developing Countries	
	(\$ bil.)	(%)	(\$ bil.)	(%)	
Mexico	5.1	12.5	17.8	31.8	23.2
Saudi Arabia	1.5	3.7	7.3	13.1	30.2
Venezuela	2.2	5.4	5.4	9.7	16.1
Korea Rep.	1.8	4.4	5.1	9.1	19.0
Taiwan	1.7	4.2	4.3	7.7	16.7
Brazil	3.1	7.6	3.8	6.8	3.4
China	0.3	0.7	3.6	6.4	51.3
Singapore	1.0	2.4	3.0	5.4	20.0
South Africa	1.3	3.2	2.9	5.2	14.3
Hong Kong	0.8	2.0	2.6	4.7	21.7
Total, 10 Countries	18.8	46.0	55.9	56.1	19.9
Other Developing Countries	22.1	54.0	43.7	43.9	12.0
Total U.S. Exports	170.6		233.7		13.8
Developing Countries (as % of total exports)	40.9	38.0	96.2	41.2	15.3
Developed Countries (as % of total exports)	66.2	62.0	136.6	58.4	12.8

* Compound annual rates of change.

Notes: Countries are ranked according to 1981 percentage share of U.S. exports to developing countries. Data include developing centrally planned economies. Total U.S. export figures include trade with unidentified countries. Figures are f.a.s. (free alongside ship) transaction values.

Source: ODC table based on U.S. Doc. *Highlights of U.S. Trade* (Dec. 1975), Table E-3; and (Dec. 1981), Table E-3. Reproduced here from ODC, Agenda, 1983.