

International Cooperation for Sustainable Economic Growth:

The U.S. Interest and Proposals for Revitalization

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"It's easy to raise the money for famine relief, for starving babies with bloated bellies and haunted eyes. But development money designed for those programs that seek to bring about long-term improvement in the lives of people - it's like pulling teeth to raise that kind of money."

quoted in World Development Forum
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Foreword

In the latter part of 1989, when it appeared that several major foreign aid reform efforts were losing momentum, the Board for International Food and Agricultural Development (BIFAD), in response to its legislative mandate to advise the President and the Congress, initiated a new effort to re-examine agricultural development assistance in the context of an overall need for change in this nation's approach to foreign aid.

After soliciting cooperation and support from a number of interested individuals and organizations, an informal organizing committee agreed to commission a blue ribbon task force of distinguished development scholars to take a new look at development strategies for the future and continue efforts to build a viable coalition for reform. Dr. G. Edward Schuh, Dean of the Humphrey Institute of Public Affairs, University of Minnesota, was selected to head the Task Force, and the Humphrey Institute agreed to become the implementing organization for the project, which initially was known as "Agriculture 2000."

The overall charge to the Task Force was to re-examine the changing needs and conditions for agricultural development globally and to identify the key elements of a strategy to bring about sustainable agricultural development more effectively in the future. Some of the specific issues the Task Force was asked to address were:

- * The key elements of a strategy for the United States to help developing countries achieve sustainable food and agricultural development.
- * The potential role and contributions U.S. research and educational institutions might make to agricultural development assistance programs. Both private and public institutions were to be considered.
- * The U.S. agricultural interests in development assistance and technical cooperation.
- * The state of world hunger, the global food situation, the prospects for feeding the world in the year 2000, and the implications of this analysis for development assistance.
- * The status of recent developments in new production technology for agriculture and the implications of that status for future increases in agricultural productivity.
- * The changing needs of developing countries and how these needs differ by region and stage of development.

- * The institutional requirements for administering an effective program of development assistance and cooperation, with special attention to operating modes and the needs for technical skills.

This was an ambitious assignment, but an advisory committee to the Task Force, made up of sponsors and key officials, emphasized the desirability of wide latitude, and of freedom to choose among the specific charges to concentrate on those deemed most fruitful.

After the initial charge was received, it became clear to the Task Force and Advisory Committee that the study should encompass more than agricultural development. Therefore, the Task Force was encouraged to examine the broader dimensions of foreign aid and the rationale for a development assistance and cooperation program for the United States--to see if there was one that could garner political support both domestically and within the countries expected to benefit from such collaboration. The development of political support is deemed critical to a sustainable program that will best serve U.S. needs and enable the nation to play the world role necessary to promote its own economic growth and development and to protect its vital national interests.

It is a testament to the importance of the issues that we were able to assemble such an outstanding group of scholars to serve on the Task Force and to devote a significant amount of their time without compensation for over a year. We are deeply indebted to them for their tireless efforts and to the institutions with which they are affiliated for allowing them to serve.

We are grateful to the Ford, MacArthur, and Rockefeller foundations, the U.S. Department of Agriculture, and the U.S. Agency for International Development for supporting this effort financially through grants to the Humphrey Institute. The BIFAD, now the expanded Board for International Food and Agricultural Development and Economic Cooperation (BIFADEC), provided a headquarters for the project and supplied staff, secretarial, and other logistical support as well as counsel and encouragement.

We are also indebted to the members of the Advisory Committee who met regularly with the Task Force and offered advice and support. They also served as an important link between the Task Force and the policy makers and opinion leaders whose support will be required if the Task Force recommendations are to have an impact on programs of the future.

William E. Lavery
Chairman of the Advisory Committee
to the Task Force

Prologue

Soon after I was appointed chairman of the Board for International Food and Agricultural Development and Economic Cooperation (BIFADEC) by President Bush in September 1990, I learned that under the leadership of the former chairman, William E. Lavery, the Board had had the foresight to initiate a study aimed at making this country's foreign aid program better suited to a rapidly changing world and to better serve U.S. interests.

In the interests of continuity, I asked Dr. Lavery, who was chairing the Advisory Committee to the Task Force, to continue in that role. We are fortunate that he agreed to do so and was able to see the study through to completion.

The one stipulation made was that the Board be kept abreast of the study as it proceeded and be given the opportunity to interact with the Task Force from time to time. Over the past year, the Board has had a number of briefings by Dr. Schuh and on occasions an opportunity to discuss preliminary findings with the entire Task Force and Advisory Committee. It was a happy coincidence that the Board, composed of several new members, was able to use the Task Force study as a cram course on the issues facing foreign aid generally and agricultural development in particular.

The Board was pleased to co-sponsor, along with the Citizens Network for Foreign Affairs, and participate in a national conference on Capitol Hill in June 1991. The Task Force findings and recommendations were thus aired at a time when the Congress was considering new authorizing legislation and appropriations for foreign aid. The conference also provided a forum for a wide range of interest groups to interact with each other and with members of the Task Force and for conflicting points of view to be discussed.

In September 1991, the Board passed a resolution expressing its thanks and appreciation to the Task Force for such a comprehensive analysis of foreign aid issues and for the high quality of the report. We also singled out what was deemed to be the most important recommendations by the Task Force and forwarded them to the Administrator of A.I.D. with our strong endorsement.

On behalf of the BIFADEC I want to thank all those who contributed to this effort, especially Dr. Schuh and the other Task Force members; John Stovall, Staff Director; Dr. Lavery; and all members of the Advisory Committee, who contributed a significant part of their time for a cause they obviously believed in deeply.

Wales H. Madden, Jr.
Chairman, BIFADEC

Preface

This report is the product of a Task Force on Development Assistance and Cooperation, commissioned by the Board for International Food and Agricultural Development and Economic Cooperation (BIFADEC). Working for over a year, the six-person Task Force interacted with several hundred development specialists and government officials, whose views and comments helped shape the conclusions and recommendations. This report, however, is a Task Force consensus, not an aggregation of the views expressed by others.

The Task Force study and this report had four main purposes:

- 1) to revitalize this nation's foreign economic assistance program
- 2) to assist in developing a political consensus both domestically and abroad in international economic cooperation and assistance,
- 3) to call attention to the importance of a sustained effort at agricultural development in the developing countries, and,
- 4) to develop new strategies for development that reflect the changed conditions in the international economy.

This report deals with a wide range of issues relating to development assistance and cooperation. The ambiguity of the term "foreign aid" and others in common usage for these programs make it difficult to limit the scope of the report. We adopt the concepts and terminology used by the Congressional Research Service, which defines foreign aid as consisting of six categories: Development Assistance (DA); Food Aid (FA); Other Economic (OE); Multilateral (M); Economic Support Fund (ESF); and Military Aid (MA).

The study began with a primary focus on agricultural development, but with encouragement from the Advisory Committee the scope was expanded to include a number of broader issues relating to foreign aid. Economic assistance (Development Assistance and Food Aid) receives the most attention. There are occasional observations about Multilateral Assistance and Military Aid, but there is no analysis of these programs.

In preparing the report, the Task Force chairman took the responsibility for preparing first drafts of all chapters except the fourth, which was done by John Stovall. These drafts served as the basis of meetings of the Task Force, the Advisory Committee, and other groups and were then revised on the basis of those discussions.

Acknowledgements and thanks are due to a large number of people. First and foremost, the chair would like to thank the other members of the Task Force. A more stimulating and dedicated group would be difficult to find. Our meetings were truly penetrating, and often became wide-ranging seminars in which the issues were explored in depth. Because of the intensity of these interactions this is truly a multiple-author, consensus report.

The chair would also like to thank the authors of the complementary papers the Task Force commissioned, which are being published under separate cover. These papers are valuable in their own right, and the Task Force benefited not only from the papers but from the interactions with the authors.

On behalf of the Task Force members, the Chair would also like to acknowledge and thank John Stovall for his contributions to this endeavor. He managed the commissioning and preparation of the complementary papers, organized the meetings of the Task Force, arranged a wide variety of meetings with interest groups, wrote the first draft of chapter 4, and generally persevered, always with a sense of good cheer. We are indebted to him.

Two successive chairs of the BIFAD (later BIFADEC) also deserve our thanks. They gave their support, encouragement, and leadership to the Task Force at every step, and were more patient with the delays in the latter stages of the process than the Chair had a right to expect. Members of two successive Boards have read drafts of the report and given us the benefit of their views.

We are also indebted to the staffs of the Agency for International Development and the Department of Agriculture who, although not always agreeing with the conclusions of the Task Force, were unstinting in their support and encouragement. We are especially appreciative of the financial support these agencies provided to make the study and report possible.

Members of the Advisory Committee took time from their busy programs to meet regularly with the Task Force, and to provide us with suggestions and advice. In addition to the two federal agencies, the Ford, Rockefeller, and MacArthur foundations provided financial support.

Finally, we are grateful to the large number of people who met with us to discuss and debate the issues. Although these people are too numerous to identify, the Task Force learned much from them and the report is better for their participation.

In conclusion, the reader will learn in perusing this report that the Task Force believes in the value and efficiency of collaborating with other countries, especially if it is viewed as economic cooperation. We also have a great deal of respect for the Agency for International Development and its staff, and for the difficult and complex challenges they face. We realize that they struggle with limited resources, changing mandates, and an almost always uncertain budget situation. If at times we are critical, it is because we view ourselves as a friend of the court.

G. Edward Schuh
Chair of the Task Force

1 Introduction

Providing economic assistance to other countries has been an important part of U.S. foreign policy since the 1930s, when modest amounts of assistance were provided to Latin American countries. Such assistance grew during World War II, with significant amounts going to European allies, first in the form of lend-lease transfers and later in allied efforts to fight the war against the Axis as the United States entered that war.

In the aftermath of the war, Europe was drifting into economic chaos and political disruption. Out of concern that the nations of Europe would succumb to communist ideology, the United States launched the Marshall Plan, one of the largest peace-time transfers of resources to other countries in history. At the peak of this program, the United States was transferring each year over 3 percent of its GNP to the war-torn countries of Europe to assist in their economic and political recovery. This assistance was not limited to the allied nations; resources were also transferred to former wartime enemies as well.

The concept of economic cooperation was an important part of the political rhetoric associated with this massive transfer of resources. The transfer itself was highly successful, in part because the countries receiving the resource transfers had the human capital and institutional arrangements needed for a modern economy, and because the mission was simple and direct. What was needed were the resources to rebuild the physical capital destroyed by the war. Helping to supply the resources to do this job resulted in the rapid recovery of the respective economies and in political stability.

The benefits to the United States from this generous transfer of resources were significant. Politically, the countries of Western Europe retained their independence and remained a part of the Western, market-oriented community of nations. Economically, the benefits were direct and immediate. The United States was facing the challenging task of reintegrating millions of members of its armed forces into the civilian labor force. Globally, the world faced a severe dollar shortage. The economic assistance provided the means whereby the countries recovering from the war could acquire goods and services from the

United States, while at the same time allowing it to sustain its own economy in this difficult transition period.

As the post-World War II period unfolded, the United States became engaged in the cold war, first with the Soviet Union and later with other nations in the communist bloc. Out of fear that the countries of the developing world would succumb to the seductive influence of communist ideology, the United States shifted its foreign economic assistance to these countries. In the beginning, the political rhetoric continued to be dominated by the concept of economic cooperation, reflected, for example, in President Truman's Point IV Program, which was designed to transfer the technical know-how of the United States to the developing countries. Later, however, the element of cooperation declined in importance and the relations with developing countries took on more of a patron/client relationship.

Economic cooperation implies that there are mutual benefits from the association and from a more proper way to conceptualize the relationship, even when it is with lower-income countries. Significant benefits do redound to the United States from cooperation with lower-income countries to attain their development goods. Economic assistance implies that the direction of the benefits are for the most part one-way. It also implies a tutelage relationship, with the implication that all the wisdom is on the side of the donor.

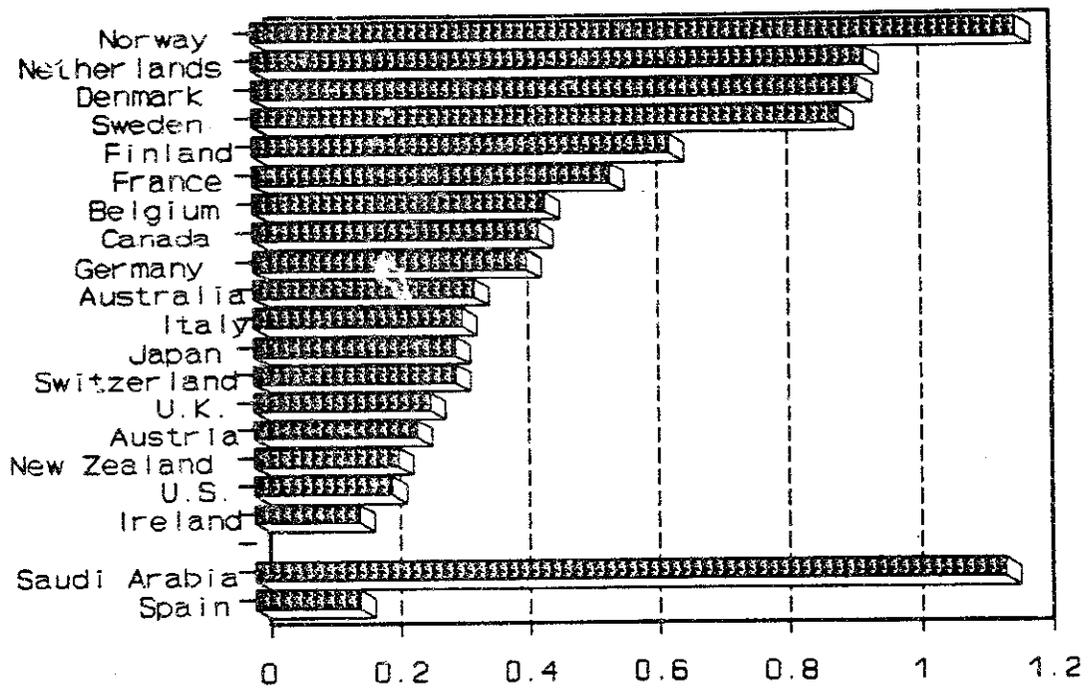
Over the years political support has declined in this country for providing economic assistance to low-income developing countries. Although once the leader in providing economic assistance to other countries, the United States now ranks next to last among the 18 industrialized market economies in the share of GNP it transfers to other countries in the form of economic assistance (0.21 percent). (See figure 1)

The allocation of these resources is heavily influenced by political and strategic considerations. The development impact too often plays little part in allocation decisions, leading to inefficient use of the nation's economic cooperative resources.

Domestic political support for foreign economic assistance has also become fragmented. In recent years, Congress has not been able to agree on what the foreign assistance program should be, and the Agency for International Development (A.I.D.) has often been forced to operate with a continuing resolution.

There is little agreement either within the nation or in the Congress on what our foreign assistance program should be. Political pressures have built up against some parts of the foreign aid program, as in the case of programs for agricultural development. What was once the world's premier economic development agency has drifted into a state of disrepair and its best professionals have sought employment elsewhere. A Congressional task force recently described this nation's foreign economic assistance program as "hamstrung by too

FIGURE 1
DEVELOPMENT ASSISTANCE AS A PERCENT OF GNP



Source: OECD, 1990

many conflicting objectives, legislative conditions, earmarks, and bureaucratic red tape."¹

The United States has lost a great deal as a consequence of this decline in its foreign economic assistance program and establishment. In the first place, it has lost much of its economic intelligence capability about developing countries as it retrenched its staff, saw the technical capacity of that staff decline, and shifted its programs toward "non-project" assistance. This has occurred at the very time the country faces an increasingly competitive economic environment and desperately needs that economic intelligence.

Similarly, as the United States has moved away from its institutional development efforts (in which it has a distinct comparative advantage), it has lost the opportunity to develop strong research and educational institutions in other countries with which U.S. institutions might cooperate in developing a stronger knowledge base on the global society and economy. Finally, as its economic assistance programs have become more widely perceived as being ineffective, it has lost the prestige it needs to contribute to global leadership.

The paradox of this situation is that many, if not most, developing countries have evolved to a point at which they can now benefit significantly from collaboration with the United States. It will be a tragic loss, both to the United States and to those countries, if this nation does not capitalize on that changing situation. The United States stands to benefit significantly from an expanding global economy.

To revitalize its program of cooperation with the developing countries, the United States needs to identify its comparative advantage in such cooperation and to establish a more stable sense of priorities in what it does. The rapid, often Congressionally-mandated, shifts in missions have buffeted its economic cooperation programs, disrupted staffing patterns, and made its programs difficult to manage.

One of the prevailing problems with these programs is that this nation often tries to attain multiple objectives with what are truly modest resources, which leads to ineffective programs. This diffuseness in the programs is in part a response to the effort to identify a political coalition to support them. However, more attention needs to be given to the issue of critical mass, which will only come from a more stable and sharply focused program. A consistent intellectual articulation of program objectives and how they might be attained more effectively will help immensely to provide a sharper sense of priorities, develop and sustain political support for the program, and perhaps increase program stability.

¹ Report of the Task Force on Foreign Assistance to the Committee on Foreign Affairs, U. S. House of Representatives, 101st Congress, 1st session. 1989.

Motivation for the Study

A number of studies on foreign economic assistance have been conducted in recent years. These include the scholarly study by Krueger, Michalopoulos, and Ruttan;² a broader, more pragmatic exercise chaired by a former dean of international programs at Michigan State;³ the report of a Congressional committee that took a careful look at the issues⁴ and an internal study by the Agency for International Development.⁵ Two other related studies were completed while this Task Force study was underway: one by the Overseas Development Council⁶ and another by the Environmental and Energy Study Institute.⁷

Despite these previous studies, there were several reasons for undertaking yet another analysis:

- 1) Dramatic political and economic changes have occurred on the international scene which have altered the conditions in which foreign economic assistance is extended and the relations between the United States and other nations. Many of these developments have not been fully recognized in previous studies. Moreover, recent significant developments, such as the collapse of the Soviet empire and the rapid emergence of newly independent nation-states, have rendered even recent studies obsolete. (These changes are reviewed in chapter 2.)

²Krueger, A.D., C. Michalopoulos, V.W. Ruttan, Aid and Development. Baltimore and London, Johns Hopkins University Press, 1989.

³ "New Challenges, New Opportunities: U.S. Cooperation for International Growth and Development in the 1990s." Ralph H. Smuckler and Robert Berg, with David F. Gordon. Michigan State University. August 1988.

⁴ Report of the Task Force on Foreign Assistance to the Committee on Foreign Affairs, U.S. House of Representatives. Washington, D.C.: U.S. Government Printing Office. February, 1989.

⁵ Development and the National Interest: U.S. Economic Assistance into the 21st Century. February 1989.

⁶ United States Budget for a New World Order: Promoting National Security and Advancing America's Interests Abroad. John W. Sewell and Peter M. Storm. Washington, D.C. 1991.

⁷ Partnership in Sustainable Development: A New U.S. Agenda for International Development & Environmental Security. Washington D.C. May 1991.

- 2) A new economic and political development agenda is emerging globally, with increased attention being given to (a) an altered world supply and demand outlook for food, (b) the emergence of Central European countries and the disintegration of the Soviet Union, forming a new commonwealth of "developing" countries; (c) growing concerns about the environment and the importance of sustainable development; (d) democratization and decentralization of policy-making and implementation; (e) development for disadvantaged and marginalized groups such as women, children, and tribal and other indigenous groups; and (f) the problem of persistently high growth rates in population. (This new agenda is discussed in chapter 3.)
- 3) Widespread calls for reform of foreign assistance programs are being heard, including suggestions that foreign aid programs are obsolete in the new international distribution of economic and political power. If they are to be continued, U.S. foreign aid programs thus need renewed justification and a revitalized rationale. Moreover, the calls for reform present a unique and propitious opportunity to participate in the reshaping of future programs. (Historical perspective on U.S. foreign aid programs is provided in chapter 4.)
- 4) There is a pervasive concern among many observers and analysts that both bilateral and multilateral development agencies are de-emphasizing agricultural development activities, despite the powerful role that it can play in the development of most low-income countries and despite a concern that the world food problem is far from solved. (Perspective on the role of agricultural development in promoting general economic development, plus an overview of the state of the world food and agricultural sector, is provided in chapter 5.)
- 5) Despite previous efforts, there is still no well-articulated intellectual framework that reflects recent developments in the international political and economic system and which could serve as the basis for developing a political consensus in support of international economic cooperation and assistance. (The modern paradigm for agricultural and rural development is synthesized in chapter 6.)
- 6) A new paradigm for this nation's economic assistance programs is needed. (A new paradigm is developed in chapter 7 and the recommendations for a revitalized program of economic cooperation are developed in chapter 8.)
- 7) Finally, the present report is not so much another evaluation of past programs as it is an attempt to devise a more effective strategy for the future. Our analysis builds on the effective work of the preceding studies in an effort to design a revitalized program of international economic cooperation that should elicit broader support from the U.S. body politic.

Can Cooperation for Agricultural and Economic Development Be Successful?

It is one of the ironies of the present state of the U.S. foreign economic assistance program, that among both practitioners of development and the academic community, there is an emerging consensus on how to promote agricultural development and on how it contributes to the general economic development of low-income countries. To put it simply, we know how to do it, and we know what it will contribute to general economic development.

Global agriculture has many examples of successful agricultural development, even in low-income developing countries. The so-called Green Revolution, with its miracle rices and wheats, is an outstanding example. It has fed hundreds of millions of additional people and contributed importantly to economic development around the world, including in the developed countries. There are numerous other examples of lesser scale but of no less importance as an indication of what can be done. Brazil is a good example. Modest investments on the part of A.I.D., the Ford Foundation, and the Rockefeller Foundation helped develop graduate programs in the agricultural sciences in that country which produced a significant flow of scientists to staff a national research system. Later investments by the Brazilian government, the World Bank, and A.I.D. helped develop a national research institution, EMBRAPA. These investments and institutional developments have had a significant impact on land and labor productivity in Brazilian agriculture.

India is another example. In that country, investments by the Ford Foundation, the Rockefeller Foundation, and A.I.D. resulted in a system of agricultural universities that educated a scientific cadre and helped develop an extensive agricultural research system. These systems have served India well. New production technology produced by the International Agricultural Research Centers has been effectively adapted to local Indian conditions. In addition, the Indian system has produced a steady flow of new technology from its own scientists. Together with investments in irrigation systems, these investments in research and education capacity have enabled India to move from what at one time was expected to be an international basket case to food self-sufficiency, and even the accumulation of stocks and marginal exports of food in occasional years.

Unfortunately, policy makers in both the developed and the developing countries have failed to capitalize on what we have learned from these successes in promoting economic development. Nor has there been a proper appreciation of what is needed to sustain the successes. Similarly, there has been a general failure to recognize that changes in the international economy have altered the basis for foreign economic assistance, and its importance to the developed countries. This has been a serious problem especially in the United States.

A strong U.S. self-interest case can be made for economic cooperation with the developing countries to help promote their economic development. The disparity in per-capita incomes between the developed countries and the low-income countries is on the order of 40-to-1. In the interdependent world we now live in, it is not clear that such disparities can continue without serious political difficulties for the United States and the other developed countries.

In addition, future markets for the United States and other developed countries will be in the developing countries, but only if those countries experience economic development and rising incomes. Finally, Peterson⁹ has found that the rate of return to economic assistance provided by the industrialized countries of the West is quite high--on the order of 50 percent.

⁹ "Rates of Return on Capital: An International Comparison," Willis L. Peterson. *Kyklos*, Vol. 42, 1st issue, 1989.

2 The Changed Setting for Development Assistance and Cooperation

The U. S. political and economic situation at the beginning of the last decade of the 20th century is dramatically different from that which prevailed when its development assistance and cooperative programs began in the mid-1940s.

As noted in chapter 1, the United States now ranks 17th out of the 18 industrialized countries in the share of GNP it provides for foreign economic assistance. Domestic political leaders seldom put foreign aid at or near the top of their political agendas. The body politic suffers from a serious case of aid-tiredness, no longer believing in the efficacy of foreign aid nor willing to make the perceived sacrifice needed to provide for it.

In addition, U.S. interests on the international scene have changed significantly. The international economy itself has changed dramatically. The perspectives other countries take toward foreign aid have also changed.

It is this changed setting for foreign economic assistance that we discuss in this chapter.

The Need to Develop a Viable Constituency for Development Assistance

The success of the Marshall Plan made it easy for the United States to turn to economic assistance as an important part of its foreign policy as it gradually realized it was in a cold war with the Soviet Union that might extend far into the future.

Caught up in what it believed was a battle for the minds of the men and women in the developing countries, application of the same principles pursued with the Marshall Plan seemed a logical thing to do. After all, the rationale for the Marshall Plan was that poverty

and destitution on the European continent would cause the countries of that continent to slip under the control of the Soviet Union. Economic revitalization had kept that from happening. Democratic and liberal traditions were preserved in Western Europe, with the United States benefitting significantly in both economic and political terms.

It was thus widely believed that a similar program for the developing world would have the same effect. Unfortunately, there was little recognition or appreciation of the vastness of the challenge, nor that the nature of the problem itself was significantly different.

Viewed from the perspective of hindsight, the recovery of Western Europe was easy. The countries of the Continent had well-developed institutional arrangements for a modern economy and society, and a large stock of human capital in the form of a well-trained and educated population. What had been devastated as a consequence of the war was its stock of physical capital.¹⁰ With assistance from abroad, this physical capital could be rebuilt quickly, with the added advantage that the latest in new technology would be imbedded in it.

The situation in the developing countries was significantly different. Not only was the population of the developing countries far greater, the stock of well-trained and educated human capital, now recognized as so critical to economic growth, was sorely deficient. The countries of the so-called Third World did not have the institutional arrangements needed for a modern economy and society, and the level of general education (primary and secondary) was quite low.

Augmenting the stock of physical capital contributed little to economic growth in such a situation. Raising educational attainment, developing viable institutional arrangements, and developing appropriate knowledge bases were enormous and complicated tasks with long gestation periods.

The difficulty and complexity of these tasks were further exacerbated by the magnitude of the problems and the small amount of resources transferred in relation to the size of the task. Translated into per capita terms, foreign economic assistance often amounted to only pennies and dollars, far less than was needed to have a significant impact on the incomes of individuals.

To further complicate things, the successful transfer of Western medical technology to the developing countries caused their populations to burgeon, creating a daunting task in furthering educational attainment while spreading scarce development resources even thinner.

¹⁰The tragic loss of life and limb in this massive conflagration also resulted in a significant loss of human capital. However, knowledge, technology, culture, and institutional arrangements, other important forms of human capital, were not destroyed.

By the mid-1960s there was general recognition that development strategies and assistance as applied to the developing countries were not having much of an impact. Moreover, the United States was at that time experiencing serious balance-of-payments problems due to the progressive over-valuation of the dollar. It was also rapidly slipping into the entanglement of the war in Vietnam, while simultaneously trying to implement the programs of the Johnson Administration's Great Society.

Both the war and the programs of the Great Society drew more and more on the nation's resources and attention. The frustration associated with losing the war caused the United States to turn inward. U.S. foreign economic assistance dwindled and rapidly fell behind other developed nations in its relative effort.

Unfortunately, few Americans recognize what a small share of this nation's GNP is provided as foreign economic assistance. Nor are they aware that we have learned a great deal about economic development and about the sources of economic growth, and that the global landscape is dotted with some very successful development efforts. Most especially, they fail to recognize that a sound economic assistance program can do much to promote this nation's own economic and political interests, and can constitute an investment in its future.

In today's interdependent international economy, investments in other countries can have as significant an effect on the welfare of our citizens as investments in the domestic economy.

Some numbers can help provide empirical perspective. This nation's GNP was \$5.6 trillion in 1990. The total amount of economic assistance we provided to other countries during the 1991 fiscal year was only about \$10 billion. Despite frequent statements to the contrary, that sum invested in the domestic economy will not solve our domestic problems.

A viable constituency for a sustained global development effort needs to be developed. It will have to be built on an informed and committed electorate. It will also have to be built on an assessment of how development assistance contributes to our own national welfare, and the identification of who benefits and in what way. These issues will be addressed in later parts of the report.

Changing U.S. Political and Economic Interests

U.S. political interests in foreign economic assistance have changed significantly over time. In the aftermath of World War II, the international economy was characterized by a dollar shortage. With the value of the dollar fixed by the Bretton Woods conventions, providing foreign aid was one means of making resources available to other countries so they could purchase U.S. goods and services.

The simultaneous realignments of a number of Western European currencies in the late 1940s, changed those circumstances. In the ensuing period, the United States has injected overvalued dollars into the international system for sustained periods of time, thus taxing the international community to finance its own domestic and international programs.

With the rapid growth in international debt by the United States over the past decade and the outlook for a continued decline in the value of the dollar, other countries are now less likely to hold the dollar as a reserve currency. Its general attractiveness for this purpose has declined. In fact, the importance of the U.S. dollar in world trade and exchange has already declined significantly. Monetizing the international economy by providing economic assistance is no longer necessary.

A second change in U.S. political and economic interests is a consequence of the relative decline of the United States role in the global economy. The U.S. economy accounted for approximately 50 percent of global GNP following World War II, with only approximately 6 percent of the world's population.

The United States was the unchallenged scientific and technological leader of the world. It was the only country able to sustain a global presence, militarily and otherwise. Its hegemony was probably as extensive as any single country ever held in recorded history. It did pretty well what it wanted to do economically or politically.

That position has changed dramatically. The United States now accounts for only about 25 percent of global GNP, with something less than 6 percent of the world's population. Western Germany and Japan already challenge it in economic terms. If the European Common Market is completed in 1992, as planned, the economic/political unit that emerges will challenge the United States in terms of GNP and population, if not in political clout.

The United States is no longer the unrivaled scientific and technological leader of the world, and finds itself falling behind in many areas. Although still the only country able to sustain a military, political, and economic presence around the world, it is able to do so only with the acquiescence and aid of other countries. It now must seek political alliances and financial assistance as well.

In a somewhat different context, the developing countries in the aftermath of World War II were a rather amorphous mass. Many of them were newly created nations, with newly gained political independence. Most of them turned inward both politically and economically, and their economic power was weak.

Some 40 years later, many of these countries have experienced substantial economic growth and have developed relatively stable domestic political systems. Many of them, such as the newly industrialized countries (the so-called NICs), have become strong international

competitors¹¹. These include Hong Kong, Singapore, South Korea, and Taiwan. Many more developing countries are poised for sustained economic growth. In fact, a significant share of the population of the developing countries may in the next several decades be empowered for the first time with economic growth as the Western world has known it.

To summarize, the political and economic position of the United States is undergoing rapid change. From a position of overweening economic and political power in the aftermath of World War II, it is rapidly emerging into a world in which it has strong competitors. It will increasingly have to find its way based on its knowledge of other countries--knowledge of their economic and technological capabilities; their economic, political, and social systems; and their cultures and values and the strategies they develop based on that knowledge. This has important implications for the kinds of cooperation and collaboration the United States should seek with other nations, a point we will return to below.

A more recent development is the end of the cold war. The sudden economic and political collapse of the Soviet Union, the emergence of Eastern European democracies, and the emergence of former Soviet republics as separate nations eliminate the need to wage an ideological struggle in the developing countries. These developments change the basis for U.S. relations with countries of the developing world, and with other countries as well.

Finally, the United States has become more fully integrated through trade with the international economy and in a sense is more dependent on the international economy. At one time the United States came about as close to having a self-sustaining, autonomous economy as any country in the world. That is no longer the case.

Today, this nation imports over 50 percent of some 13 raw materials judged to be critical for its manufacturing sector.¹² It now imports over 50 percent of its petroleum. And it imports significant shares of its producer and consumer goods and services which presumably can be produced to mutual advantage elsewhere. The further development of the countries that supply these goods and services will benefit the United States, especially if those countries have an inherent comparative advantage in producing these items.

The other side of the trade relationship is equally important. The United States needs to earn foreign exchange if it is to pay for the goods and services it needs from abroad. Thus it needs expanding markets for its own goods and services. The greatest potential for

¹¹For an assessment, see Neil McMullen, The Newly Industrializing Countries: Adjusting to Success. Washington, D.C.: National Planning Association, British-North American Committee, 1982.

¹²For detail, see Schuh, G. Edward, The United States and the Developing Countries: An Economic Perspective, National Planning Association, Washington, D.C., 1986.

those markets is in the developing countries. Such markets will not be realized, however, unless those countries increase their own buying power.

Thus, in effect, the strongest justification for U.S. economic cooperation programs is no longer the need to curry political favor in those countries but rather to assure their sound economic growth and development.

Changed Perspectives From the Developing Countries

The developing countries themselves have experienced changes in their perspectives toward international economic assistance. Although their diversity and the different stages at which they find themselves on the development ladder make generalization difficult, a number of general propositions seem to apply.

First, many developing countries have evolved more stable political regimes, have become less defensive about their colonial past, and have developed more confidence in their independence. Latin America is an outstanding example of a region in which authoritarian military regimes have been overturned and democratic governments put in their place. With their newly-found independence and confidence, these countries insist that they be treated as peers and not as the poor cousins of the past. This environment makes it more difficult to curry political favor through military assistance programs, and at the same time makes it easier to develop truly collaborative arrangements to attain mutual goals.

Second, many developing countries increasingly recognize the value of strengthening their capacity in science and technology as the basis for their future economic growth and development. Despite the difficulties many countries have had in sustaining their higher-level education and research systems in the face of severe budget difficulties, the Green Revolution of the miracle rices and wheats has been an object lesson. The value of adequate health care systems, lower-level education, adequate nutrition, and family planning are also increasingly recognized.

Finally, many developing countries have now brought their higher education and science and technology systems generally to a point at which U.S. institutions can beneficially collaborate with them on the basis of peers. Faculty exchanges can now be beneficial to both sides. U.S. students can benefit from rigorous educational programs in some developing countries. Research and development budgets have grown rapidly in some of those countries, and there is much new knowledge being generated from which the U.S. science and technology establishment can well benefit. Although there is still much institutional development to be done in most developing countries, the agenda in many of them has shifted from a client/patron relationship to one in which scientific and technological collaboration is the key to developing sound, longer-term relationships.

The Complementarity Between Development Assistance and Trade

Foreign aid was once referred to by Johnson as the soft option compared to the hard option of international trade.¹³

Donor countries viewed foreign aid as the soft option to trade liberalization—a liberalization that would make it possible for the developing countries to earn their foreign exchange through increased exports.

Recipient countries viewed foreign aid as the soft option because it made it possible for them to avoid or delay the economic reforms necessary to become more competitive in the international economy and to reduce deficits in their balance of payments. Such reforms include more realistic exchange rates, a reduction in the excessive protection of their manufacturing sectors, and the elimination of self-imposed barriers to exports generally.

The policy of providing foreign aid as a means of addressing balance-of-payment deficits should have been abandoned long ago. Such assistance had a certain rationale as long as the fixed-exchange-rate, Bretton Woods conventions prevailed. As long as there were proscriptions against exchange rate realignments, international financial assistance was needed if the prevailing exchange rates were to be sustained.

However, the Bretton Woods fixed-exchange-rate system disappeared for all practical purposes in 1973, when the United States devalued the dollar for the second time in an 18-month period and announced that henceforth the value of the dollar would be whatever foreign exchange markets said it was worth. Developing countries are no longer bound to keep their exchange rates fixed, and in fact fix them only at their own convenience or political whim.

In this setting, balance-of-payments support only delays the day of reckoning for needed exchange-rate realignments, and thus in most cases delays needed reforms in economic policy rather than providing the incentives to make such reforms possible.

In today's world, foreign economic assistance might better be viewed as a complement to international trade. To the extent that it is a response to inefficient or incomplete markets, as in the case of the capital markets to finance human capital, it makes possible a higher rate of economic growth in the recipient country. This in turn provides the basis for an expansion of demand for imports and an increase in the supply of exports.

¹³ Johnson, Harry G., Economic Policies Toward the Developing Countries, The Brookings Institute, Washington, D.C., 1967.

Used in this way, economic assistance serves as the basis for an expansion in trade generally and thus becomes a complement to international trade. Both the trade and the aid can expand economic opportunities by making the economic pie larger than it would be in the absence of either.

Another dimension to the exchange rate issue is worth exploring, since flexible exchange rates are an important part of the changed economic setting for development assistance and cooperation. Other things being equal, an increase in the capital flows from the United States to the countries with which it is collaborating tends to result in a fall in the real value of the dollar and a rise in the value of the currency of the country receiving the economic assistance. The fall in the value of the dollar causes the United States to be more competitive in international markets, thus reducing competitive threats engendered by its collaboration with other countries.

In light of the modest size of the U.S. foreign aid program in recent years, this effect is likely to be minor on the U.S. side of the relationship. However, on the side of the developing countries, the relative effect can be large. In many African countries, for example, the combined magnitude of foreign economic assistance from multiple sources has resulted in significant increases in the value of their currencies.¹⁴ This over-valued currency significantly reduces the competitive edge of these countries in international markets, and at the same time increases competitive pressures from abroad on their own domestic industries. The economic effect of this condition--the classic "Dutch disease"--provides a good reason to keep foreign aid flows modest in size. It also underlines the importance of the quality of that capital flow rather than its quantity.

The International Capital Market as a Means of Financing Conventional Capital

When foreign economic assistance first gained impetus in the aftermath of World War II, there was little that could be described as an international capital market. A great deal of uncertainty clouded the future of the international economy. Commercial linkages among nations had been destroyed. Some international communications facilities were also devastated. In that setting, it was natural that governments, mainly that of the United States, should step in as a supplier of capital.

By the early 1960s, that situation had changed significantly. Commercial banks in Europe discovered that they could relend the dollars on deposit with them and make a profit. Thus emerged what was called a Eurodollar market. With experience, that market grew

¹⁴See Lele, Uma (ed.), Aid to African Agriculture: Lessons from Donor Experience. Baltimore and London, Johns Hopkins University Press, forthcoming, 1992.

rapidly, and eventually the banks began to relend other currencies on deposit with them. This burgeoning capital market came to be referred to as the Eurocurrency market.

In 1973, a signal event occurred as the OPEC countries quadrupled petroleum prices over night. Since petroleum was both priced and transacted in U.S. dollars, the international economy was soon awash with what were described at the time as petrodollars. Many observers at the time were concerned that these dollars be recycled lest the international economy collapse in a Keynesian crisis of inadequate demand. Considerable pressure was put on the commercial banks to relend the petrodollars they held on deposit to keep this from happening.

The supply of loan funds was augmented by a supply of regular loan funds. Many central banks, including the U.S. Federal Reserve Bank, pursued highly stimulative monetary policies to avoid a collapse of the international economy. Commercial banks felt a responsibility to recycle the money as well, and thus was born the international debt crisis.

The situation created by the increase in petroleum prices also helped make many developing countries willing borrowers. Higher petroleum prices amounted to a large negative shift in the external terms of trade for petroleum importers.

The classic remedy for such a shift is to devalue one's currency as a means of restoring balance in the external accounts. Borrowing on the international capital market is an alternative policy. In general, policy makers--especially those in developing countries--prefer to avoid devaluations if at all possible since they tend to create domestic political difficulties due to the rising prices of critical items for urban consumers. The problem was also complicated at the time because many observers expected the increase in petroleum prices to be short-lived. In such a setting, borrowing to deal with what might be a short-term problem made a certain amount of economic sense.

Thus was born a marriage of convenience. The banks were under pressure from national governments and international lending agencies to relend their petrodollars and other currencies. The developing countries were avid borrowers as they sought to offset the burgeoning deficits in their balance of payments and to sustain their economic growth. The problem was that the commercial banks in their rush to keep the money moving did very little by way of sound appraisal and analysis to determine whether the developing countries would be able to service and eventually repay their loans.

This large monetary stimulus gave rise during the 1970s to the largest and most sustained expansion in the international economy in the post-World War II period. Interest rates were low in nominal terms, and in many cases negative in real terms. National governments, private sector firms, and parastatals borrowed with alacrity and the international capital market expanded rapidly.

This monetary bubble all came to an end at the close of 1979. The value of the U.S. dollar went into a free fall as OPEC again engineered a huge increase in petroleum prices. Paul Volcker, then Chairman of the U.S. Federal Reserve Board, rushed home from Europe to bring about a dramatic change in U.S. monetary policy. The Board decided to stop increasing the money supply to finance the continuing and growing deficit in the budget of the U.S. government; henceforth, the Treasury would have to borrow from the capital market to pay for the federal deficit.

Almost overnight the developing countries that had borrowed extensively on the international market were hit with a double shock. Real interest rates rose quickly from low, and in some cases, negative rates to unprecedentedly high rates—eventually on the order of 20 percent. Unfortunately, most of the developing countries had been borrowing on short term, 30-day to 60-day capital market instruments. In a very short period of time they were faced with the need to refinance their loans at unexpectedly high rates of interest, a factor which significantly increased the burden of servicing their debt.

Their problems did not stop there, however. The huge rise in real interest rates in U.S. capital markets gave rise to an unprecedented rise in the value of the dollar as the United States increased its borrowing from abroad to meet its growing budget deficit. This inflow of capital to the United States pulled capital away from the developing countries.

In addition, the rise in the value of the dollar further increased the burden of servicing and repaying the dollar debts obtained from abroad. The rise in the value of the dollar meant that the borrowing countries had to give up more in terms of their domestic resources to acquire the dollars needed to service and repay their international debt. In effect, they were faced with a second large negative shift in their external terms of trade.

Under the circumstances, it is little wonder that the developing countries have experienced such serious economic difficulties in the intervening period, nor that they view their external problems as an international debt crisis. Many countries, especially those in Latin America, have experienced sustained and significant declines in per capita incomes. These problems have been exacerbated by their unwillingness, or political inability, to undertake the economic reforms needed to get their economies back on a sound path to economic recovery.

However, interest rates have since declined, as has the value of the U.S. dollar. Debt service as a share of export earnings for the indebted countries has declined by about 50 percent since the peak of the debt crisis in the first half of the 1980s, to around 25 percent. With spotty and uneven reforms, the world is muddling through in dealing with what was a severe monetary disturbance.

There are at least two lessons to be learned from this experience.

First, the problems of the developing countries in meeting their international obligations were not entirely of their own making. The sudden change in U.S. monetary policy imposed an enormous shock on the borrowing countries. The international commercial banks were especially lax in their standards in lending to the developing countries. The international community put the emphasis in the first instance on recycling petro-dollars rather than on adjustment. And although the developing countries should have undertaken economic reform in a more expeditious fashion, the adjustment problems many of them faced were of unexpected and unprecedented proportions.

Second, a well-integrated international capital market has emerged on the international scene. Although banks that suffered losses as a consequence of their past errors are now less prone to participate actively in that international capital market, it is open to governments and private firms that pursue sound economic policies. It is a viable means of mobilizing savings from diverse sources and channeling those savings to where the rate of return is highest.

This capital market has the advantage of providing the developing countries with diversified sources of capital. Prior to the emergence of this market developing countries were faced with a choice of external savings that was limited to accepting foreign aid and thus the potential for political meddling in their country, or equity investments by multinational firms, which had similar political sensitivities. The new capital market gives them a third choice, which involves much less political sensitivity.

This market also gives the lending or cooperating developed countries new options. They no longer need to be a major source of capital for the developing countries. Instead, they can limit economic assistance to those cases in which there are incomplete or inefficient markets. These tend to be the markets for human capital. And it is investment in human capital that can be of greatest benefit to the United States, especially if made in such a way as to be of mutual interest and benefit. These issues will be discussed in more detail in a later chapter.

The Changing Role of Multilateral Development Banks

There are four multilateral development banks: the World Bank, and three regional banks--the Interamerican Development Bank, the Asian Development Bank, and the African Development Bank. Each of these banks plays a unique role. However, certain generalizations can be made about them that pertain to issues discussed in this report.

Consider the World Bank. Most of the capital it lends to the developing countries is mobilized from national and international capital markets. The exception is the International Development Association (IDA), a World Bank affiliate, which provides concessional loans

designed to address the problems of the poor in low-income countries. The money must be paid back, but no interest is charged on it. (There is a modest service charge.)

Two things stand out about the World Bank's lending operation. First, for over a decade now it has been involved in policy-based lending, shifting away from project lending that seeks to build the capacity of the recipient country.

Policy-based lending comes in two forms, both designed to help induce and facilitate policy reform. The first is called structural-adjustment lending, which focuses on general policy reforms for the economy as a whole--such things as devaluations of currency, trade reform, privatization of parastatals, and a general reduction in interventions in the free play of market forces. The second is sectoral-adjustment lending, which promotes similar reforms with the emphasis on particular sectors of the economy. Approximately 30 percent to 35 percent of the World Bank's lending now goes for these kinds of policy-based lending. There is a rather special irony in this shift in lending objectives on the part of the Bank.

The International Monetary Fund was created as part of the post-World War II monetary arrangements precisely to provide the short-term lending needed for balance-of-payments support in a fixed-exchange-rate system while reforms were undertaken. When the international economy shifted to what is for all practical purposes a flexible exchange rate system, in principle the need for such lending disappeared. That it did not disappear completely is a reflection only of the failure of all countries to shift to flexible exchange rates.

This issue merits a number of comments. First, as the World Bank shifts its lending to support adjustment processes, it does so at the expense of loans to build needed capacity in the developing countries. Second, the payoff from such lending seems to be modest at best since it amounts to little more than balance-of-payment support. In that sense, it makes it possible for the recipient country to delay the needed reforms rather than helping it through a transition process. Such lending would, in fact, have a higher payoff if it were used to facilitate labor adjustment within the economy and to build future capacity for growth than for what it is now used. Moreover, policy reform creates its own reward. A country should not have to be compensated to do it.

Finally, there are three other trends and developments in the World Bank that are of interest.

First, the Bank has allowed its technical capacity to decline over the years. At one time it employed outstanding specialists on tropical agriculture as well as highly qualified technical experts in infrastructure and other fields. That is no longer the case, and for a variety of reasons that go beyond our interests here. In effect, the Bank is increasingly dominated by economists and generalists. Such specialists have their place in a development bank, but technical specialists are needed as well. In fact, the services of technical

specialists are critical inputs into the development process that are in short supply in the developing countries.

Second, research is receiving less and less attention in the Bank, and the remaining research capacity increasingly focuses on economic issues. A consequence of the last reorganization of the Bank was to focus a larger and larger share of its analytical capacity on operational issues. This shift in emphasis has occurred at the very time that the international economy has become more open, and international interdependencies have become increasingly important in designing projects and loan programs. To make development loans effective in the changed international economy, more research and more knowledge is needed, not less.

Finally, although much of the rhetoric surrounding the Bank's lending programs focuses on institutional development, the effort is rather limited and not very effective, to say the least. This limited effectiveness is due in part to the fact that the Bank's focus in institutional development activities is primarily on sending a limited number of local staff abroad for advanced training, and not on developing collaborative arrangements with parallel institutions in the developed countries that could provide technical assistance for such activities. The Bank's activities in this field also lack effectiveness because the Bank simply has not made a commitment to institutional development.

The other multilateral development agencies are subject to some of the same criticisms. While the Interamerican Development Bank has over the years given higher priority to investments in human capital than has the World Bank, it, too, has neglected the development of collaborative arrangements with institutions in the developed countries as a means of institutional development.

National Economies that Are Increasingly Open

When foreign economic assistance first received its impetus in the aftermath of World War II, the international economy could best be described as a collection of relatively closed, autonomous economies tied together with a relatively small amount of international trade.

Today, the international economy is increasingly well-integrated. International trade has grown at a faster rate throughout the post-World War II period than global GNP. A huge international capital market has emerged to link national economies together in ways they have not been linked in the past. The effect has been to make national economies increasingly open to economic forces from the international economy.

Economies that become increasingly open become increasingly beyond the reach of national economic policy. This leads to two important institutional developments.

First, some part of economic policy-making and implementation shifts up to the international level and becomes imbedded in the codes, rules, and disciplines of international institutions such as the General Agreement on Tariffs and Trade. It also becomes increasingly imbedded in systems of economic integration such as the Canada-United States Free Trade Agreement and the EC-92.

Second, some part of policy-making and implementation shifts downward to the state and local levels. In the process, moreover, economic policy changes character. It shifts away from an emphasis on product and commodity markets, and focuses instead on income policies and on resource issues. Such shifts have become increasingly important around the world, not the least in the United States where state governments have been growing at a rapid pace over the past decade.

These shifts in where economic policy is made and implemented increase the demand for new institutional arrangements. Developing countries, for example, now need a capacity to understand international institutional arrangements such as the General Agreement on Tariffs and Trade (GATT). They also need an analytical capacity to understand issues at the international level if they are to devise and implement sound local policy. At the same time, they need localized institutional arrangements to develop sound policies at the state and local level.

To summarize, developing countries in the past needed national institutional arrangements to develop national economic policies. Development agencies thus attempted to help them develop the capacity to attain this end. In today's world, however, developing countries need assistance in developing the capacity to understand the international economy, and in developing state and local research and analytical capacities to help them decentralize their policy-making and implementation.

Concluding Comments

The setting in which international economic assistance is implemented has changed dramatically since the provision of such assistance became an important part of this nation's foreign policy. Because of this change, the amount of foreign aid needed has changed, and the use to which it should be put has also changed. U.S. interests in foreign aid have changed, and its assistance programs should have changed more than they have. The same applies to the developing countries.

A new political constituency needs to be mobilized for a different approach to foreign assistance based on international economic cooperation, and a different intellectual rationale for such cooperation needs to be articulated. The remainder of this report is oriented toward that end.

3 Changes in the Development Agenda

The previous chapter considered how the *setting* for international development assistance and cooperation has changed over time. In this chapter we discuss how the development *agenda* is changing. Both sets of issues suggest the need for new approaches and perspectives to the U. S. foreign assistance and cooperation programs.

Changes in the development agenda include: 1) a changing world supply-and-demand outlook for food, 2) the emergence of Central European countries and the former Soviet republics as developing countries, 3) growing concerns about the environment and sustainable or resilient economic growth, 4) democratization and decentralization of policy making and implementation, 5) development for women, children, and other disadvantaged groups, and 6) the problem of persistently high rates of population growth. Each of these will be discussed in turn.

Changes in the World Demand and Supply Outlook for Food

The world has experienced a number of Malthusian scares in the post-World War II period. One of these occurred in the mid-1960s; another in the mid-1970s. Some observers began to believe it was a characteristic of the world food situation that we would experience these scares on about a 10-year interval. However, the mid-1980s was characterized instead by surpluses and quite low commodity prices.

The history of these episodes contains some important lessons for thinking about the future. The rise in food prices in the mid-1960s was followed by technological breakthroughs that brought us the miracle rices and wheats--new plant material which, combined with the use of modern inputs such as commercial fertilizers and pesticides and the controlled use of water, produced significant increases in yields and output. These improved varieties were adapted to local ecological conditions around the world and thus substituted for traditional varieties. The result was an important contribution to an increased food supply

for the world. It is estimated that the increased output from these improved varieties provided food for some 500 million of the world's rapidly growing population.¹⁵

The rise in food prices in the mid-1970s, although widely interpreted as a supply crisis, was as much, if not more, a demand phenomenon. It is true that the world food supply declined in 1973 for the first time in 20 years. However, the large rise in food prices that ensued was due in large part to sustained increases in the demand for food in this period.

For example, the developing countries of the world, with their large and burgeoning populations, experienced during the 1970s one of the largest and most extensive periods of economic growth and development they had experienced in history. This contributed importantly to a rapid increase in the global demand for food.

In addition, the international economy experienced the largest monetary convulsion of the post-World War II period as a consequence of the OPEC-induced quadrupling of petroleum prices in 1973, which was followed in turn by the international debt crisis. In the interim, however, efforts to stave off a collapse of the international economy resulted in an enormous monetary stimulus to it. This stimulus was augmented by the tendency of the developed countries, and especially the United States, to pursue easy monetary policies to facilitate the needed adjustment process. Commodity markets, highly sensitive to changes in monetary conditions, saw commodity prices rise rapidly.

Another large increase in petroleum prices took place in 1979, and the prognosis was for another large monetary disturbance. The disturbance came, but it was just the opposite of the earlier episode. As noted in chapter 2, on this occasion U.S. monetary authorities dramatically revised this nation's monetary policy. The result was an enormous monetary squeeze, with both nominal and real interest rates rising to record levels in both the United States and in international money markets.

The worst economic depression since the Great Depression of the 1930s followed in 1982 and 1983. This squeeze also brought to fruition the international debt crisis, which wreaked havoc on the economies of many developing countries. These countries suffered economic stagnation, with significant declines in per capita incomes in country after country.

Demand for food and other agricultural commodities was weak in the face of growing populations and increasing needs, not only because of sluggish economic growth generally but because many developing countries had to make herculean efforts at chopping off their imports in order to restore balance in their external accounts. Commodity prices thus

¹⁵Consultative Group on International Agricultural Research (CGIAR), Summary of International Agricultural Research Centers: A Study of Achievements and Potential, Washington, D.C., World Bank, 1985.

declined while poverty and hunger increased, and the external terms of trade shifted dramatically against many developing countries.

The problem of weak demand was exacerbated by the commodity policies of the European Community and the United States. Both the EC and the U.S. were supporting the prices of their principal agricultural commodities at prices higher than market-clearing levels. As costly stocks accumulated, both the European Community and the United States resorted to dumping by means of export subsidies. This dumping worsened the already serious problem of weak demand in the international economy and contributed to significant declines in international commodity prices. This excess production problem continues in both the EC and the United States, largely as a result of misguided commodity policies.

The low commodity prices and the highly visible surpluses in the developed countries have caused many observers to believe the world food supply problem has been solved. Moreover, many U.S. agricultural interests have attributed the slump in commodity prices to the rapid adoption of new technology by the developing countries and have been critical of U.S. foreign assistance programs for helping bring about that diffusion of new technology.

Nothing could be further from the truth. The low commodity prices were a consequence of weak market demand from the developing countries and the dumping of excess production induced by misguided commodity policies of the European Community and the United States.

Part of the evidence for this interpretation of these events in international commodity markets is that agricultural output during the 1980s was on essentially the same trend line as it was during the 1970s when many observers thought the world was facing a Malthusian crisis. There was some increase in the trend in per capita availability during the 1980s, but that was largely due to a modest decline in population growth rates in the developing countries during this period.

Contrary to the optimistic view of the world food situation, the world is, in fact, once again facing a precarious situation in regard to its supply of food. The world's grain harvest fell a staggering 86 million metric tons, or nearly 5 percent, in 1991. In 1992, the world's grain reserves are projected to decline to their lowest level since 1976, when total consumption was much less than it is now. Commodity prices are starting to rise as demand outpaces supply and stocks drop to dangerously low levels.

The decline in global grain output and grain reserves is due to a number of possibly transitory events. Plantings were reduced in the United States, partly to lower its reserves. Political chaos in the former Soviet Union also led to much smaller crops in that part of the world. The year 1991 was also characterized by civil conflict and political instability in a significant number of other countries, especially in Africa.

For the longer term, the outlook is growing increasingly gloomy. A number of factors are at work:

First, the dwarfing of the rice and wheat plants, which produced such a large increase in yield potential, has gone about as far as it can go. There is a limit to the reduction in height that can occur.

The exhaustion of the potential for further increases in yields by dwarfing is dramatically reflected in the case of rice. The highest yield potential for high-yielding rice was obtained in 1968 at the International Rice Research Institute, the source of the miracle rices. Additional attempts at further increasing the yield potential have met with failure. It appears that future increases will be obtained only with alternative breakthroughs such as improved efficiency in photosynthetic processes--tasks that will require significant commitments of resources to basic research.

The potential for further significant increases in the output of the improved rices and wheats is further limited because their geographic spread is leveling out. This implies that the adaptive research that has contributed to the geographic spread of the improved varieties has also done about as much as it can do. Either further breakthroughs will have to be made in the basic plant material, or sustained increases in yields in other crops will have to be obtained. At this writing there is nothing on the international scene that suggests a potential breakthrough is in the wings.

The poor outlook for increases in yield potential is exacerbated by the decline in capacity for agricultural research in the developing countries. At the beginning of the 1980s, quite a number of developing countries had nascent graduate programs that were training agricultural scientists for their national research systems. Simultaneously, they were developing significant agricultural research systems.

However, the serious economic problems of the developing countries in the 1980s has caused these graduate training programs and fledgling agricultural research systems to fall into serious disrepair. Lack of resources and inadequate salaries, have caused scientists to take up other activities to survive, or to migrate to alternative employment in other countries or in international organizations.

Support of the international system of agricultural research centers, guided by the Consultative Group on International Agricultural Research (CGIAR), has also waned over time. Support for this system has always been modest. The current budget for the 13 strategically located centers is only \$240 million for the current year. That is approximately double the cost of a modern fighter plane, of which the United States has hundreds. To put this number in further perspective, the current budget for agricultural research at the Indiana Agricultural Experiment Station is approximately \$44 million, about one-fifth of the entire budget for all 13 international centers (and Indiana is a relatively small state).

Vernon W. Ruttan, an expert on the global agricultural research system, argues that the international community ought to be investing in the international research system at a level of about \$1 billion per year.¹⁶

The additional dimension to the problem is that many of the developing countries are poised for rapid economic expansion. The international debt problem is gradually being resolved by a sophisticated process of muddling through. The debt problem itself has led to significant improvements in economic policy in these countries, which will lead to more broad-based economic growth. The expectation is that the 1990s will witness an unprecedented expansion of economic growth in the developing countries. This will contribute to strong increases in the demand for food and agricultural output, and put upward pressures on prices. The expectation is that the demand for agricultural output will outpace the supply of agricultural output in the decade ahead.

The United States will not escape the consequences of this increase in food prices. Farmers will once again do well, as they did in the 1970s. But consumers will not. An increase in real food prices is equivalent to a decrease in real incomes per capita. Thus a global food crisis can be expected to create significant political and economic problems for the United States, as it did in the mid-1970s. For that reason it is important that the United States assist in helping resolve the world food problem.

The Central European Countries and the Former Soviet Republics as Developing Countries

Dramatic events over the past two years have included the democratization of Eastern Europe, and the shift to economies that are more market oriented. Together with the demise of the Soviet Union, and the emergence of its component republics as relatively independent nation-states, these developments create vast new political and economic challenges for the United States and important opportunities for international cooperation.

The United States has a significant vested interest in the successful transition of these newly independent countries to freer societies with more market-oriented economies. The breakdown of the former communist bloc means the end of the cold war and a declining need for major commitments to spending on armaments.

The end of the cold war also promises a more stable international order, and thus the potential for more open international intercourse. Successful economic development in these countries also means expanding markets for the United States, and a growing source of raw materials, consumer goods, and eventually capital goods as inputs for the manufacturing sector in the United States and other countries of the industrialized West. Most importantly,

¹⁶ Study of the External Review Process in the CGIAR.
Washington, D.C.: CGIAR, January 1987.

many of the citizens of these countries look to the United States as a country to be emulated and as a society with which they would like to have greater contact.

As experience is indicating, these countries face enormous challenges in reforming the institutional arrangements that govern their economy and in establishing a democratic society.

The United States is well-situated to provide the assistance that can help them move forward. It has the premier free market economy on the international scene and thus should be able to assist in designing and reforming the institutional arrangements needed for such an economy. It has also had over 200 years of experience with a democratic form of government. It should thus also be able to collaborate with colleagues in those countries in designing and establishing democratic institutions.

The emergence of these potential demands for increased international collaboration will put a significant drain on development resources that might otherwise go to the traditional developing countries. But the events in Eastern Europe and the former Soviet Union open a whole new dimension to international collaboration for the United States. It is an opportunity the nation cannot turn away from. International peace and the stability and prosperity of that part of the world will have a significant influence on the development of our own economy and society. The United States has everything to gain from establishing closer links with, and building a stronger knowledge base on, this rapidly changing part of the world.

The Environment, Sustainability, and Resilient Economic Growth

Concerns about the environment and the sustainability of economic growth have emerged as significant economic and political issues in recent years, both at home and abroad. The decline and periodic disappearance of the ozone layer over Antarctica as an apparent consequence of the use of chloro-fluoro-carbons has given legitimacy to these concerns. At the same time, they make clear that environmental problems have an important international dimension.

Concerns about global warming as a consequence of the pollution of the atmosphere with the so-called greenhouse gases have added a new and potentially important environmental problem to the agenda. This problem, too, has important international dimensions. If the grim predictions about the greenhouse effect are valid, there are likely to be significant shifts in the location of agricultural production, even greater shifts in underlying comparative advantage, and potentially large geographic shifts in the location of people and their economic activities.

The denuding and destruction of tropical rain forests has concerned many people for many years. The growing attention being given to the threat of global warming has

accentuated the significance of deforestation. Trees and other vegetative growth absorb carbon dioxide from the air, and carbon dioxide is one of the principal greenhouse gases. Thus the destruction of tropical rain forests further weakens the global ecological balance and increases the likelihood that global warming predictions will prove true.

Deforestation is not the only environmental problem in the tropics. Perhaps even more important are what we choose to call the silent environmental crises—associated with soil erosion, the pollution of underground water supplies and of lakes, streams, and waterways caused by excessive use of commercial fertilizers and pesticides.

In countries such as Brazil these problems may be far more important economically than the problems of the tropical rain forest since they affect the regions that produce the countries' major food supplies. We refer to these problems as the silent crises because they receive so little attention from the international community.

Preserving the world's endowment of genetic material is another important issue. Often articulated as the problem of preserving biodiversity, the preservation of this genetic material is the key to providing sustainable economic development into the future. Genes that carry resistance to disease and pests as well as new sources of productivity growth for plants and animals are often found in this material. Yet, as species are wiped out due to deforestation and other intrusions of humankind, this material is lost forever.

Many, if not most, of these environmental problems are associated with the lack of economic development and with poverty in the developing countries, as well as with bad economic policies.

For example, the lack of new production technology for agriculture contributes to an extensive form of agricultural production. Increases in output take place on the extensive margin, causing output to expand onto marginal lands and up the slopes of hills and mountains. Once these areas are brought under the hoe, their underlying resource base is rapidly destroyed by erosion and other factors. The population is eventually forced to move on to other even less productive lands. In the process the original vegetative cover which could have sustained the soil and provided for absorption of water is destroyed. Species of plants and animals are also often wiped out.

To appreciate the significance of this source of environmental problems, one need only draw the contrast with a country such as the United States in which the modernization of agriculture has made it possible for the removal from production of over 100 million acres of land in the post-World War II period. Were it not for the enormous increases in corn yields in the United States, for example, the production of this commodity would undoubtedly be expanding up the hillsides of Appalachia and onto the slopes of the Rocky Mountains.

Economic policies that discriminate against agriculture by means of trade and exchange rate problems further aggravate the problem. They, too, cause agriculture to expand on the extensive margin. Persistence in the pursuit of anti-employment policies associated with import-substituting industrialization also contributes to the problem. By limiting the absorption of labor into the nonfarm sector, these policies cause labor to be trapped in agriculture, with the result that the poor and disadvantaged are again pushed onto marginal lands.

Poverty itself is an important contributor to these problems. The poor do not have the resources or the access to credit that would enable them to adopt modern agricultural practices and to develop a productive agriculture. This causes them to exploit the land and the underlying resource base rather than to build it up for a sustainable future.

Sustainable and resilient economic development refer to development that sustains and, if possible, augments the underlying resource base for future development. Concern about sustainability is not an anti-development or anti-modernization posture. To the contrary, economic development and modernization are the keys to developing more rational modes of production and to dealing with the underlying environmental problems.

Helping to develop and to modernize the agriculture of the developing countries is thus of vital interest to U.S. citizens. It is the only way in the long run to sustain the underlying resource base (including genetic material) for future generations, both in this country and abroad.

This motivation for international cooperation and assistance has not been high on this nation's political agenda in the past. With the growing data on the seriousness of problems with the ozone layer, emergence of a potentially serious problem of global warming, and the increasing importance attached to environmental and sustainability problems by the body politic, environmental problems are moving higher on the domestic political agenda.

Significantly, these problems increasingly have international dimensions to them and provide important opportunities for international collaboration. They also, of course, require international cooperation and collaboration if they are to be resolved.

Democratization and Decentralization of Economic Policy Making and Implementation

Two powerful forces have emerged on the international scene in recent decades.

The first is the increased openness of national economies throughout the world, which causes economic policy making and implementation to be decentralized to the state and local level within national economies.

The second is the rapid shift to more democratic forms of government in parts of the world once dominated by authoritarian forms of government. These powerful forces are not unrelated. Moreover, they have important implications for international assistance and cooperation programs.

Democratic forms of government are generally viewed as being more stable and thus able to contribute to a more stable international polity and ambient. They are also believed to lead to economic policies that are more closely focused on the problems of society.

Among other things, the political empowerment of the poor will assure that policies are directed more to the resolution of their problems than to providing income transfers to the well-to-do. Similarly, more general political empowerment in the developing countries and in the countries of Eastern Europe and the republics of the former Soviet Union will likely move environmental and sustainability problems higher up on the political agendas in those countries.

The United States has a vital interest in assuring that present trends toward more democratic forms of government continue. Sustaining economic development in these countries will contribute importantly to that trend. Direct assistance in helping to establish democratic institutions can also contribute if done in a sound and considered fashion.¹⁷

The growing trend toward decentralization of economic policy making and implementation is also an important issue, and one which international cooperation efforts can help facilitate. The policy analysis and evaluation capacities of developing countries, Eastern Europe, and the former Soviet Union, such as they are, are mostly located centrally at the national level. If policy making and implementation are to shift down to the state, province, and/or local level, the capacity to analyze and evaluate economic policies will also have to shift down to these lower levels. This capacity can be developed and strengthened by means of international cooperation and assistance.

Development for Women, Children and Other Disadvantaged Groups

Most countries, including those in the developed world, seriously discriminate against their women, grossly underinvest in their children, and discriminate against tribal groups, native populations, or other minority groups. These problems are especially acute in the developing countries. They are at one and the same time a consequence of the low level of

¹⁷Two cautions are in order on this issue. First, our familiarity with the cultures, mores, and institutional arrangements in these countries is fairly limited. Second, understanding our own political system does not necessarily prepare us to make the adaptations required for other societies.

economic development in those countries and a contributor to slow rates of economic development.

Policies that discriminate economically against particular groups in society lead to inefficient resource use and the failure to capitalize on the diverse talents and potential of these groups. Similarly, failure to invest in the human capital of such groups sacrifices important sources of potential economic growth.

Examples of such problems abound in the developing world. In many of the countries, for example, women are the principal source of labor for agriculture. Yet, extension programs tend to concentrate on the male head of the household. Moreover, women are not given access to development opportunities such as education and training on the same scale as men.

The issue is what to do about these problems. Providing the same legal rights to women as to men is an important place to start. This is in part a question of the legal system. Reform must start with attempts to reform the constitutions, which provide the basic legal rights for women and other groups in society. Reform also involves changes in basic attitudes and traditions in such societies, even though these are potentially revolutionary changes and can unleash powerful political forces.

Economic development itself can provide strong liberating forces. As a society's demand for labor grows and it becomes relatively scarce, pressures also grow to allow women to enter labor markets and to gain access to development programs that enable them to raise their own productivity. Broadening the development process and reforming the legal system can thus have significant effects on liberating women and broadening their access to the benefits of economic development while at the same time broadening the development process itself.

Children tend to have even less political empowerment than do women. In many cases they are the last to have access to food, given the importance of providing food for the worker in the family. Similarly, the first- and second-born children are often needed to help provide a subsistence living for the family. Consequently, these children are forced to forego schooling, with the result that society significantly under-invests in the education and training of its eventual labor force. This problem is also rooted in basic poverty. Promoting economic development thus provides one of the means of addressing the problems of children per se and at the same time promoting more rapid and broad-based economic growth for all.

The problems of children are especially severe in countries that have rapidly growing populations. The consequence of sustained rates of high population growth is a population highly skewed toward the young. In many such countries the percentage of the population 18 years or younger is as high as 85 percent.

Such figures emphasize the importance of children and young people as members of the labor force. They also emphasize the high dependency ratios in these countries, and the difficulty of providing adequate levels of education, schooling, and training for such a large portion of the population.

Many developing countries are home to a number of tribal or native population groups. These groups also tend to suffer discrimination in a variety of forms. They are discriminated against in the labor market, have limited or no access to social programs or educational and training programs, and for the most part have only limited political enfranchisement. The potential of these groups to contribute to general economic growth is also thus sacrificed.

To the extent the United States is interested in promoting broad-based economic growth and development in the developing countries, it has to give more attention to helping broaden the access to social and educational services of these population groups (women, children, tribal groups, and native populations). Broadening access is key to establishing and preserving democratic processes in these countries. It is also the key to broadening and sustaining the development process.

Population Issues

The problem of high population growth rates is implicit in much of the new development agenda that has been discussed above. Rapid population growth rates in the developing countries contribute to sustained increases in the latent, physiological demand for food and agricultural output and if translated into market demand, may lead to sustained rises in the price of food in the international economy. They also lead to a chain of detrimental events where increased demands against the underlying natural resource base cause serious environmental problems, which create more problems in sustaining the development process. They contribute to the perpetuation of mass poverty by making it difficult to invest at appropriate levels in the human capital of burgeoning population groups.

In summary, high population growth rates create a vicious circle of poverty engendering more poverty and make it difficult to raise the quality of life and productivity in country after country.

Lowering population growth rates is the key to obtaining sustained economic growth and to raising the quality of life in the developing countries.

Those who argue that a rapidly growing population is an asset because it provides a broader supply of human capital from which talent can be drawn to further the welfare of humankind fail to recognize that the potentially larger pool of human capital cannot be realized if a society is unable to invest in it to develop its people.

Two important issues need to be considered in addressing the global population problem.

The first is that economic development itself is an important means of lowering population growth rates. As per capita incomes rise, families tend to reduce the number of children they have and to invest more in those they do have in the form of improved nutrition and health care, and higher levels of education and training. In a sense, fewer children, with higher levels of investment, are substituted for a larger number of children with low levels of investment. Broad-based economic development is thus a powerful means of reducing global population growth rates.

The second issue is that authoritarian means do not have to be used to introduce family planning and to lower fertility rates. After having two or three children, many families, especially the women in these families, realize that more children will mean less investment in the human capital of the children they already have. The issue is to make the family-planning technology usually available to the upper-income groups of these societies available to the lower-income groups as well. In fact, making such technology available is key to broadening the development process in those countries in the short term and to obtaining sustained increases in per capita incomes over the longer term.

In summary, addressing the population problem in the developing world is the key to solving many of the other problems on the new development agenda. In the final analysis, it is the only way to make investments in the human capital of these societies at socially optimal levels feasible and thus to obtain high rates of economic growth.

Concluding Comments

Over time the development agenda has been subject to more than its share of passing fads. A shifting agenda may be the key to sustaining support and interest in the prolonged efforts needed to attain sustainable economic development.

The new agenda identified above has an important pervasive feature, however. That is the absolute requirement for investment in the human capital of the developing countries if they are to have a broad-based and sustained process of economic development.

It is that kind of economic development that citizens of the United States should want, since it is the key to their future markets and sources of raw materials, input supplies, and consumer goods.

It is also the key to the development of a democratic world order that will be more politically stable without the need for massive investments in armaments and military establishments.

4 An Assessment of Past and Current Foreign Aid Programs

This chapter contains a brief assessment of past trends in foreign aid programs, examines the current debate about the rationale for foreign aid, and reviews A.I.D.'s present approach to development and the thrust of its current programs. The basis for the concerns of the Task Force about A.I.D.'s support for, and approach to, agricultural development is treated in some detail. Important goals of the chapter are to show the extent to which current program trends differ from the Task Force recommendations and to demonstrate the need for a revitalized paradigm for foreign aid.

Historical Perspective

Since the end of World War II, foreign aid has served many interests and been used to pursue numerous objectives. The occasional foreign aid bill that makes it through the Congress and survives a presidential veto is usually a product of a variety of special interests.

The Administration, no matter which party controls the White House, is usually the bill's most powerful supporter, typically attempting to shape it to achieve foreign policy objectives. However, to obtain the votes in Congress, managers of the bill must rely on those with vested interests, whether they be a business hoping for a deal or an organization concerned with hungry children.

Foreign aid programs have changed in many ways since the Marshall Plan. These changes, which can only be understood in light of the diverse interests supporting foreign aid and by the growing public disenchantment with it, are a result of several forces and trends.

First, the Congress has imposed increasingly rigorous and detailed restrictions and earmarks on military, development, and food aid programs. The Congress has also repeatedly sparred with the executive branch about the use of aid that appears to support repression, corruption, or the enrichment of the already privileged.

Second, programs and approaches to development have proliferated over the years, based in part on changing views about the nature of the development process. This has led to shifting emphases, new approaches, and fads in development policy. Unfortunately, most new initiatives fail to survive long enough to demonstrate success or failure.

Third, military aid has shifted away from grants to greater reliance on cash and sales of arms on credit, in response to the argument that recipient countries should have become able to provide for their own defense. In more recent years, as recipients of military aid have faced serious debt problems, assistance has again shifted back to grant aid.¹⁸

To understand the changes in this nation's aid program, it is useful to reduce the ambiguity in the meaning of the term "foreign aid." In some cases, this concept refers only to programs administered directly by A.I.D. In other cases it is used to refer to both multilateral (such as the World Bank and the regional development banks) and bilateral programs administered by A.I.D.. Military assistance is sometimes included and sometimes not. Sometimes foreign aid refers only to economic assistance. On still other occasions, it refers to the concept used by the Organization for Economic Cooperation and Development--"Official Development Assistance"--which includes both bilateral and multilateral assistance but excludes military aid and certain other non-development programs.

In this report, we use the term "foreign aid" to refer to six major categories tracked by the Congressional Research Service, a package totaling about \$15 billion annually in recent years (figure 2). Most of the attention of the Task Force, is focused on Development Assistance in particular and to a lesser extent on the Economic Support Fund and Food Aid.

Trends in the major foreign aid categories used by the Congressional Research Service reflect a number of interesting changes since the end of World War II. The largest component over most of this period has been Military Aid (MA), which contributes very little in a direct way to economic development. Trends in this component tend to be associated with changes in world tensions or U.S. involvement in armed conflicts.

The Economic Support Fund (ESF), the second largest component in recent years, is used to provide flexible and timely support to friendly countries to help the United States gain its security and international political objectives. ESF tends to be concentrated in a few strategic countries. In 1990, for example, 77 percent of such funds was allocated to six countries: Israel, Egypt, Panama, Nicaragua, Pakistan, and the Philippines. Much of the

¹⁸. An Overview of US Foreign Aid Programs, CRS Report for Congress, Congressional Research Service, March 1988.

ESF is used for balance-of-payments support, but a considerable amount (with the exception of Israel) is also used to support development projects. ESF has been an increasing source of funds for agricultural projects in recent years, accounting for over 40 percent of the total amount requested for agriculture in FY 1992.

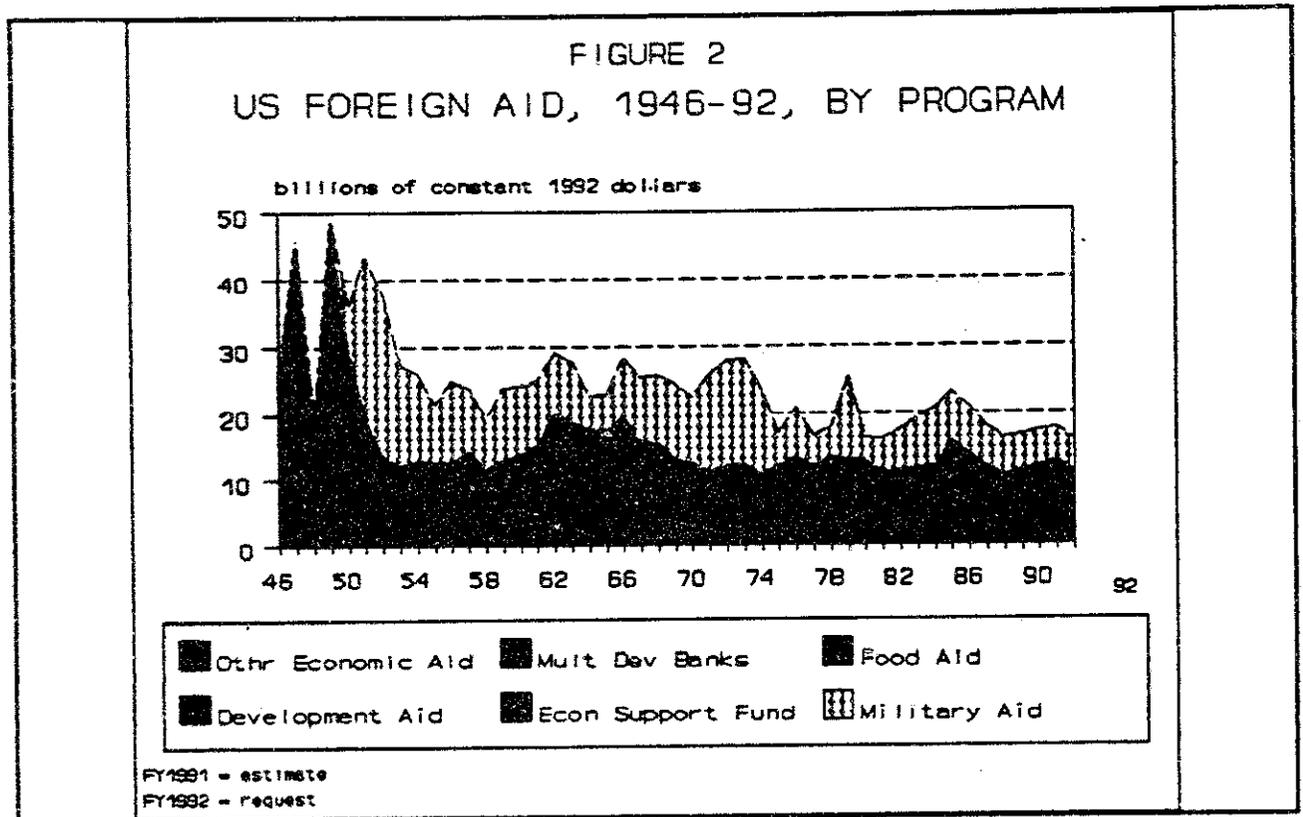
Development Assistance (DA), intended for long-term development purposes as contrasted to ESF for security and strategic purposes, reached a peak in the mid-1960s, when it had appeal both as a means of containing communism and for enhancing development. In more recent years, DA has tended to decline slightly, perhaps reflecting the disillusionment with aid and development and a de-emphasis of economic development as an objective.

Food Aid became an important component of the nation's aid program in the mid-1950s, coinciding with the emergence of costly U.S. domestic grain surpluses. However, it declined dramatically when the surpluses disappeared in the mid-1970s and early 1980s¹⁹. Support for food aid in the Congress comes primarily from farm interests and the "hunger lobby." Those concerned with promoting economic development tend to view it as a mixed blessing. They know it can be a disincentive to food producers in developing countries, but that if used properly, it can provide additional resources for economic development. Moreover, this is a part of the foreign aid program that tends to have strong and continuous domestic political support from agricultural interests and humanitarian aid advocates.

Multilateral Aid emerged in the 1960s as an important component of US foreign aid. This coincided with the emergence of the regional development banks as a significant source of capital for developing countries, and the establishment of the International Development Association (IDA) in the World Bank as a means of providing concessional loans to the poorest of the poor among the developing countries.

Figure 3 shows the distribution of foreign aid by region. The fluctuating aid levels shown for each region reflect occurrences of regional conflicts and shifting foreign policy priorities. Massive aid for Western Europe following World War II, which peaked in 1951 at \$28 billion (in 1989 dollars) but then declined sharply during the 1950s, dwarfs the total foreign aid program of today of about \$15 billion. Asia replaced Europe as the major recipient of aid in the late 1950s and 1960s, coinciding with the Vietnam War and security threats in Southeast Asia. The Middle East replaced Asia as the region receiving the largest share of aid funds in the latter 1970s as the Camp David Accord became the focus of efforts to reduce regional strife and protect U.S. political and economic interests in that region.

¹⁹ The actual quantity of food provided fluctuated much more than is evident from figure 2 (which is reflected in dollar terms) since prices tend to rise sharply as surpluses disappear. The appropriations for Food Aid are made in dollars, but the amount that can be purchased varies considerably with price fluctuations.



Aid to Latin America shows two bulges in funding. The first occurred in the early 1960s and was associated with Fidel Castro's takeover of Cuba in 1959. That aid was later institutionalized for a time as the Alliance for Progress. The second bulge in funding occurred in the 1980s and reflected the takeover by the Sandanistas in Nicaragua and emerging security concerns in Central America. What is striking about aid levels to Africa, on the other hand, is how meager they have been compared with other regions and in relation to the magnitude of that continent's problems. Even in the peak period of the mid-1980s, aid to Africa was only 11 percent of the total aid program.

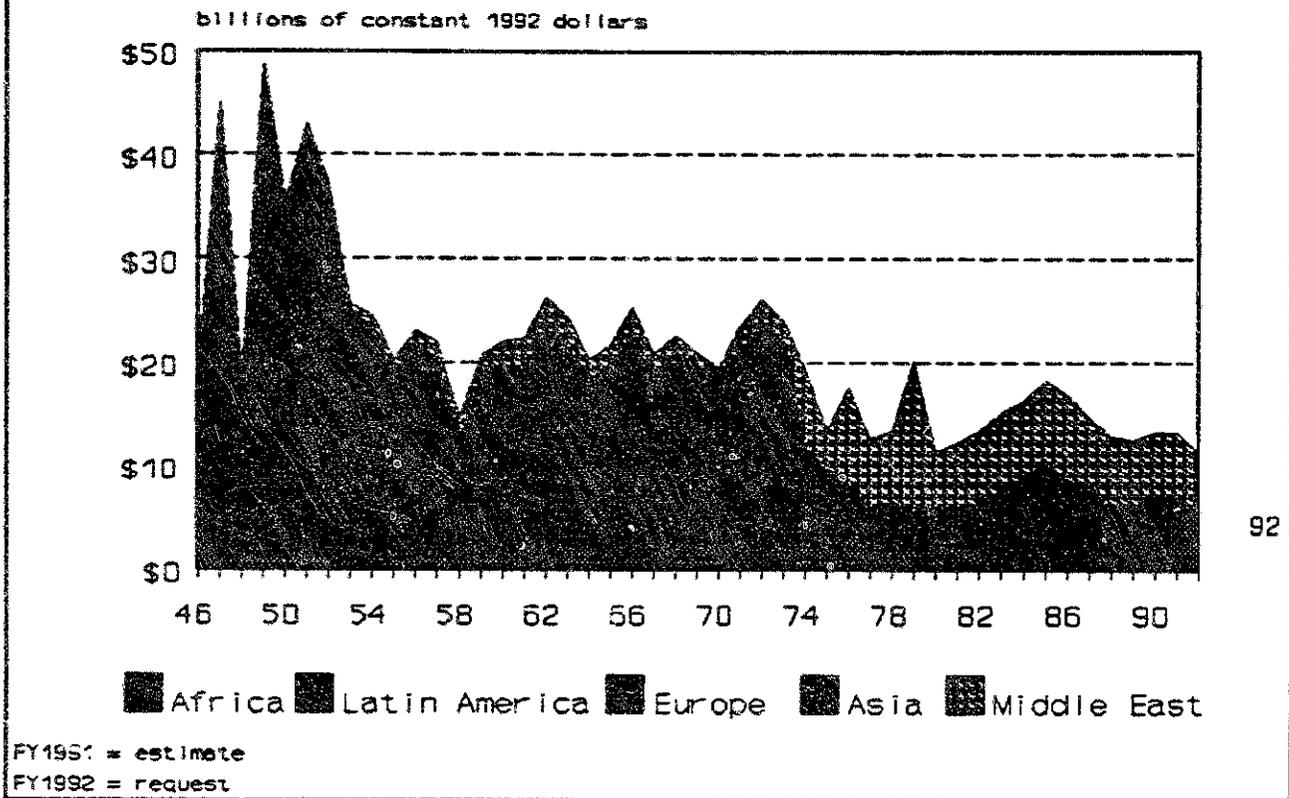
U.S. foreign aid as a percent of GNP (figure 4), shows a steady decline since 1950. It is now just over one-quarter of one percent of GNP²⁰, far below what many European countries and Japan provide.

Recent Changes in Program Priorities

Budget levels are not the only changes over time in the U.S. foreign aid program. Priorities have been repeatedly pushed and pulled in different directions. An increasingly

²⁰. It should be noted that figure 4 represents total foreign aid, including Military Aid, considerably more than Official Development Assistance, used in figure 1.

FIGURE 3
US FOREIGN AID, 1946-92, BY REGION

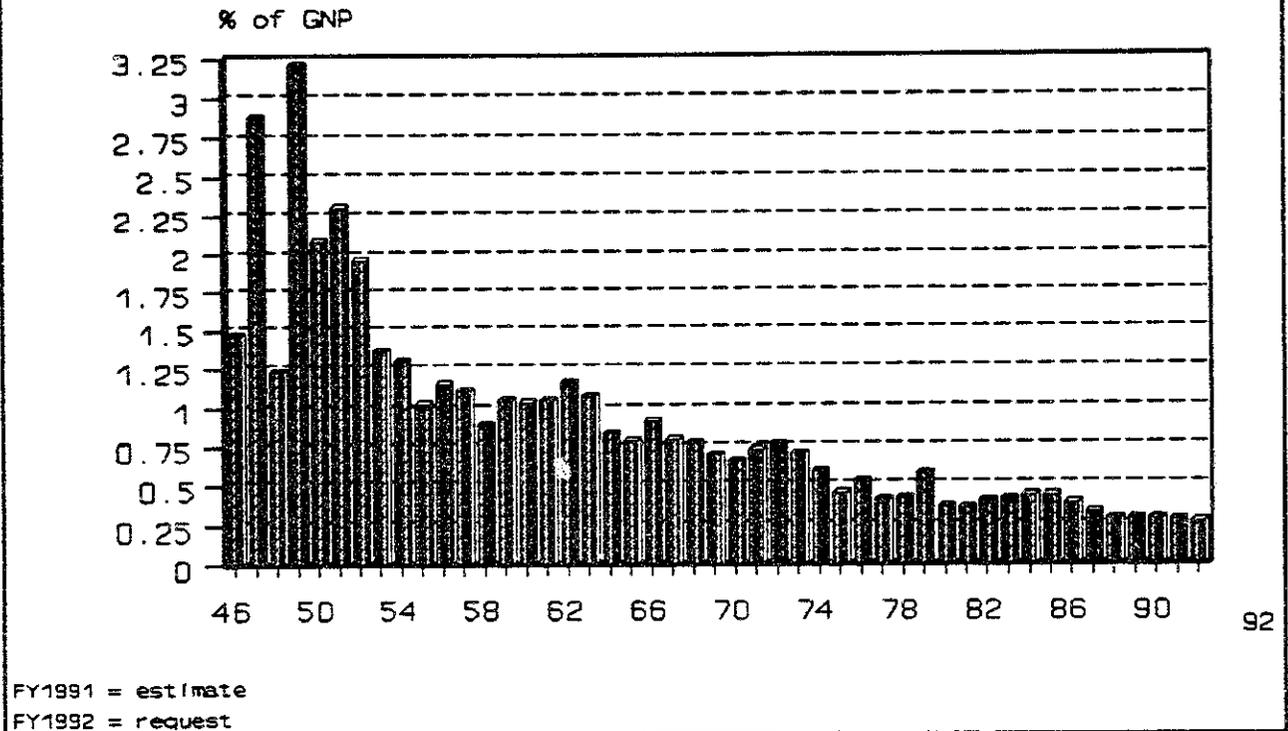


distrustful Congress has imposed numerous restrictions and mandates. A constantly changing and increasingly frustrated A.I.D. leadership has shifted program direction from one development fad to another in the search for an elusive political coalition to provide support for the program. And the current Administration has been searching for a replacement for communist containment as the rationale for foreign aid.

For many years the communist threat provided the main underpinning for foreign aid, and the aid budget rose and fell according to the tension level between the United States and the Soviet Union. Other objectives, such as the elimination of hunger and famine, remained but rode on the coattails of the more powerful and emotionally charged issues surrounding the security of the free world.

As the threat of communism and the fear of the USSR has faded in recent years, the basic rationale for foreign aid has come under scrutiny. Some were quick to seize the opportunity to use such assistance to further U.S. commercial interests in the Third World. The Agency has solicited support from the U.S. business community by proposing and promoting infrastructure programs tied to procurement of U.S. goods and services, and other

FIGURE 4
FOREIGN AID, AS A % OF U.S. GNP,
FY1946 - 1992



forms of "tied aid and mixed credits" that would allow the use of development assistance funds to subsidize selected U.S. exports abroad.²¹ While such programs have long been permitted in specific situations to counter similar support by foreign governments for their own exporters, such assistance has generally been discouraged as a matter of U.S. policy because it is inconsistent with the long-standing U.S. position favoring free trade.

In testimony before the House Foreign Operations Subcommittee, Reginald Brown, a senior A.I.D. policy official, proposed a major reallocation of funds to support programs of this nature, stating that, "The most important contribution the U.S. makes to economic progress in developing countries is its own economic growth. U.S. economic growth has

²¹ This and the following paragraphs draw heavily on "The A.I.D. Identity Crises--How do you spell Development", by C. Stuart Callison and John G. Stovall in The Foreign Service Journal, January, 1992.

generated increased markets for developing country exports. U.S. economic assistance must become part of the U.S. effort to compete in the global market."²²

The so-called "Killer Bees" bill (sponsored by Senators Boren, Bentsen, Byrd and Baucus) was another recent attempt to use foreign aid to subsidize U.S. business with large-scale use of mixed credits and tied aid for capital projects. Although it passed the Senate 99-0 in 1991 as an amendment to the Foreign Assistance Act, the conference committee pared it down considerably, with help from the Administration, which opposed that provision based on its conflict with the U.S. trade negotiation position.

The problem with these attempts to find a new rationale for foreign aid is not that their goal is to serve U.S. interests, for indeed they should. The problem is that they serve only short-term vested interests, not the national interest or our longer-term interests.

This struggle for the soul of A.I.D. has been going on for some time. The Congress attempted to capture it with the 1973 Foreign Assistance Act, known as the Basic Human Needs (BHN) mandate, or "New Directions," which redirected development assistance to the poorest people of the world. In the latter half of the 1970s, however, the Congress and the Carter Administration began to shift resources away from BHN toward security interests. The Reagan Administration accelerated the shift toward security interests and stressed the private sector as the key to development.

The Current Approach to Development

Soon after Dr. Ronald Roskens was sworn in as Administrator in March 1990, he tried to clarify the mission of the Agency. The starting point was five major foreign policy challenges, which Secretary of State James Baker cited at Roskens' swearing in ceremony. These became known as "Baker's Charge:"

- 1) Consolidate the worldwide trend toward democracy.
- 2) Build strong, free-market economies.
- 3) Help the (regional) peacemakers.
- 4) Address transnational threats--environmental degradation, drug trafficking, and terrorism.

²² Statement in the record of the Hearings of the U.S. House of Representatives, Appropriations Subcommittee on Foreign Operations, March 21, 1990.

5) Strengthen international ties . . . to ensure that the positive world trends . . . will continue. . . must respond to needs in the developing world.

A committee of top A.I.D. staff was asked to draft an Agency mission statement based on the challenges presented by Baker. But early drafts omitted any mention of development itself or of human capacity building. Baker's fifth point had become simply "disaster relief." After much internal debate, the final A.I.D. mission statement issued in September 1990 added a "concern for individuals and the development of their economic and social well-being," and a statement that "A.I.D. assists nations. . . improve the quality of human life and. . . expand the range of individual opportunities by reducing poverty, ignorance and malnutrition."

Despite this apparent victory for development advocates, the last statement quoted was conspicuously missing from the Administrator's statement in the A.I.D. FY 1992 Congressional Presentation (submitted in February 1991), which quotes most of the rest of the mission statement. Furthermore, the Bush Administration rewrite of the Foreign Assistance Act, submitted to Congress in April 1991, building human capacity is listed as a form of humanitarian assistance rather than either a productive investment or an ultimate development goal. The reduction of poverty became a "humanitarian assistance need" rather than a central purpose of economic development.

Following the adoption of a mission statement, the Administrator developed a series of initiatives, ". . . to refocus and redefine our future." These included:

- 1) An Environmental Initiative, which committed the Agency to strengthening internal staff resources and addressing priority problems in developing countries by building indigenous public and private capacity and improving environmental policies.
- 2) A Democracy Initiative, designed to "support the evolution of enduring Democratic Societies." It proposes focusing A.I.D. resources to 1) strengthen democratic institutions, 2) integrate democracy into the A.I.D. program by establishing the promotion of democracy as a strategic goal over the broad range of AID programs, 3) reward progress in democratization and establish democratization as a funding allocation criterion, and 4) establish rapid response mechanisms for democratic breakthroughs or to meet unanticipated needs.
- 3) A Business and Development Partnership Initiative, whose objective is to engage the American private sector in efforts to develop and sustain free-market principles and broad-based economic growth. Among other things, this initiative creates a Business Advisory Council, offers the services of A.I.D. overseas missions to American firms seeking to do business in foreign countries, and establishes a business internship program for U.S.-MBA

students who wish to participate in an overseas work-study program in countries where A.I.D. operates. The plan also proposes a Capital Projects Fund to implement "developmentally sound capital projects of direct strategic relevance to U.S. trade competitiveness."

- 4) A Family and Development Initiative, which proposes to use the family as a starting point for analysis of what people need, how they use the resources they have, and as an organizing principle for mobilizing the energy of people to create progress.
- 5) A Strategic Management Initiative, internal to A.I.D., aims to reorganize and streamline administrative procedures, tighten financial controls, and strengthen evaluation programs.

Although the Administrator has stated that these initiatives do not replace on-going programs but rather should be reflected in all program activities, they clearly signal priorities for A.I.D. missions in designing new projects. These priorities have caused distress among the economic development community, and especially among those who believe the development of human capital and human capacity are the primary means to self-sustaining development. These groups fear that by implication the absence of specific mention of a program in the initiatives signals low priority. As we will argue below, those fears are well-founded.

Declining Emphasis on Agriculture

Throughout the study on which this report is based the Task Force has repeatedly voiced concern about the decline in attention given to agriculture by A.I.D. as well as by other international donors. The official response has been that there has been no downgrading of agriculture. In informal discussions with Agency officials, the reaction has been mixed. Some deny any decline in commitment to agriculture, but others, mainly those at the working level, speak with passion about how the Agency has turned its back on agriculture. The Task Force, after examining this question in some detail, continues to have a number of concerns, which are explained in the following sections.

Budgetary Support for Agriculture

Although comparable data series are inadequate to fully document changes in total budgetary support for agriculture and related fields, it appears that total A.I.D. funds obligated to agriculture, nutrition, and natural resources reached a peak in the mid-1980s, and by 1990 had declined by about one-third (see table 1). Estimated FY 1991 obligations for agricultural projects were up about 15 percent from 1990. Appropriations for 1992 are not yet finalized. The share of Development Assistance funds (including the Development

Fund for Africa) devoted to agriculture fell from 54 percent to 33 percent from 1980 to 1990.

The data thus show that agriculture as a share of total development assistance declined significantly over the decade as a whole, and in nominal and real terms it declined from 1985-1990. It is still too early to tell if that decline has been reversed in the 1990s.

Changing Composition of Agricultural Projects

Of more serious concern than the decline in share and in total expenditures for agriculture is the changing nature of agricultural projects. There is a disturbing tendency recently to emphasize short-term, and private-sector activities, at the expense of long-term investments in human capital and public-sector institutions.

Table 1

**Trends in Budget Support for Agriculture and Related Fields
A.I.D.
(Millions of dollars)**

	<u>1980</u>	<u>1985</u>	<u>1990</u>
Agriculture and Related Fields	\$904	\$1,251	\$815
Percent of DA and DFA used for Agriculture and Related Fields	54	42	33

Source: The total budget support (obligations) for agriculture (including rural development, nutrition, and natural resources) comes from an internal A.I.D. data system known as "Activity Codes/Special Interest," (AC/SI). It attributes project totals to the appropriate categories in the AC/SI system. Data over the time period in the table are not strictly comparable because they were generated with slightly different methodology; however, they are the best estimates available. The total for 1990 comes from the Bureau for Program and Policy Coordination briefing for Administrator Alan Woods in 1988. The 1985 data come from a special study by Chemonics, Inc., dated December 30, 1988; 1990 and 1992 data are from the AC/SI.

Reliable data to trace changes in the various types of agricultural projects are limited, but several indicators are available. Funding for agricultural education and research is trending down and that for policy reform is up. High-profile advocacy of the private sector has led to a rapid rise in the number of agribusiness projects. But the Task Force has found no advocacy for building the public-sector institutions necessary to create a favorable economic climate for the private sector.

Lack of Agency Leadership in Agriculture

There has been a noticeable absence of attention to agriculture by senior A.I.D. management in recent years. Holdcroft and Nielson report, in a paper prepared for the Task Force after interviewing some 50 mid-level and senior A.I.D. staff, that "....a number of persons in the Agency's key leadership positions believe that the era of major support for agricultural development has passed."

A major study undertaken by former Administrator Alan Woods,²³ aimed at reshaping the future of development assistance, virtually ignored food and agriculture. (The word "food" or "agriculture" did not even appear in the table of contents.)

No Agency-wide strategy paper or special initiative paper on agriculture has been written in recent years, and important policy guidance documents (such as the A.I.D. Annual Budget Submission Guidance Cable) have not addressed the role of food and agriculture in development. The absence of an internationally recognized agricultural scientist who can speak for A.I.D. in international forums is equally significant.

Although anecdotal, these pieces of evidence add up to, at best, a leadership preoccupied with other things; or at worst, a belief that the world's food problems have been solved and that agriculture is no longer important as a means of promoting economic development.

Decline in Staff Capacity

Another indication of the de-emphasis of agriculture in this nation's assistance programs is the drop in the technical capacity of A.I.D. staff to design and implement agricultural projects. The most visible measure of this decline is the number of agriculture

²³ Development and the National Interest: U.S. Economic Assistance into the 21st Century. Washington, D.C.: Agency for International Development. 1989.

and rural development positions in A.I.D., which decreased 25 percent between 1981 and 1989.²⁴

These numbers tell only part of the story, however. In the previously cited paper commissioned by the Task Force, former senior foreign service officer Lane Holdcroft reported (1990) that many of the dwindling number of agriculturalists are frustrated that they are not used effectively and see fewer opportunities to rise to senior positions.

"More time is spent coping with A.I.D.'s burdensome bureaucratic requirements than addressing host country needs," Holdcroft notes.

Reliance on Short-Term Funding Sources

The Task Force study calls for a new paradigm for development assistance that features investments in human capital, institution building, and science and technology--all long-term undertakings. Their success requires long-term commitment, patience, and stable funding. The congressional line-item appropriations most suited for, and likely to provide, that stability are Development Assistance, and the more recent addition, the Development Fund for Africa. However, much of the support for agriculture (approximately 40 percent in 1990) comes from the Economic Support Fund, the short-term budget support for politically important troubled economies, rather than from DA or DFA. This is still another commentary on the changing priorities for agriculture.

This reliance on ESF reflects many things in addition to the decline in commitment to agricultural development. It also reflects the use of aid as an instrument of U.S. foreign policy and as a means of achieving U.S. strategic objectives.

Krueger, Michalopoulos, and Ruttan note this trend as a lesson for the future in assessing the effectiveness of aid.²⁵

"The increasing share of assistance provided through instruments such as USAID's Economic Support Fund, which by its very nature tends to emphasize strategic and foreign policy objectives rather than economic development," the authors say, conflicts with development objectives.

²⁴Staffing in other technical fields has declined also, a reflection of the Agency's shift away from longer-term, capacity-building efforts to short-term, balance-of-payments support and policy-reform initiatives.

²⁵ Anne O. Krueger, Constantine Michalopoulos, and Vernon W. Ruttan. Aid and Development. Baltimore and London: Johns Hopkins Univ. Press. 1989.

A related development noted in the study is the increase in "non-project assistance," sector grants and structural adjustment loans or grants. While these generally large projects may be classified as agricultural, they seldom contribute to the kind of sustainable development advocated by the Task Force.

A Decline in Priority for Public-Sector-Based Human Capital Initiatives

Many members of the current A.I.D. leadership come with a strong private-sector, market-economy philosophy, and some believe that solutions to developing-country problems are to be found only in initiatives that focus directly on the private sector. They tend to view the public sector as a major source of the problems that developing countries face, not as the solution. These notions have been translated to mean that projects whose aim is to strengthen public institutions are discouraged in favor of private-sector initiatives.

Cables, strategy statements, and project documents constantly remind the reader in both subtle and not-so-subtle ways that the private sector is "in" and the public sector is "out."²⁶ New project starts now indicate that this message has been heard. For example, there is almost a rush to initiate projects with "agribusiness" in the title, under the banner of promoting the private sector. Agribusiness projects have jumped 137 percent since 1989, and in the FY 1992 proposed budget, 23 percent of the funds for new agricultural projects are for agribusiness start-ups. New projects that emphasize investment in human capital are relatively scarce.

Although a legitimate component of the food and agriculture sector, agribusiness projects are no substitute for sustainable institutions or for investing in other forms of human capital. If they merely provide assistance to the private sector in developing countries, the pervasive risk is that they will have little lasting development impact.

The crucial missing component that would most improve the climate for the private sector in most developing countries is improved public services such as a reliable data and market information system, dependable market and credit institutions, a research and

²⁶ For example, a cable to all A.I.D. missions in Asia and the Near East Region, in June 1990 with the subject: "Making Business the Business of Missions", exhorted mission staff to spend more time with the business community in developing countries rather than traditional contacts in the public sector. It went on to say "We will know when we have succeeded when your whole staff can pass the 'Rolodex Test'", referring to desk top telephone directories. "Most of all you will know it at the end of the week, when you as directors of missions, know that you have called, met with, entertained and written to at least as many if not more businessmen/women than government bureaucrats."

extension system, and educational institutions to provide trained manpower. None of these should be confused with those public sector parastatals that in the past displaced legitimate private sector activities in many developing countries, and that resulted in much economic wastage. Moreover, the new paradigm advocated by the Task Force is also based on the generation of economic growth by the private sector. But a necessary condition for that growth to occur is viable public-sector institutions that provide services the private sector will not supply.

The A.I.D. leadership has made a grievous error in failing to understand the difference between bloated parastatal institutions that displace activities more properly located in the private sector, and those public-sector institutions needed to provide support for the private sector by developing new knowledge, developing new technology, providing for the schooling and education of the population, and improving health and nutrition. Short-term resource-transfers to the private sector will not result in sustainable economic development, nor will it promote U.S. interests over the longer term.

Concluding Comments

Several trends in A.I.D.'s programs and initiatives run counter to the policies advocated by the Task Force. The decline in support for projects whose objectives are to build human capital, the strong bias against public sector institution-building initiatives, and the waning interest in agriculture and agricultural development are troubling signs that promise more frustration and missed opportunities.

A silver lining in these troubled clouds is that the debate about the kind of development activities A.I.D. is to support has not been concluded. A recent cable to all missions announced a new policy agenda for the Agency that invited comment on many of these issues.²⁷ Moreover, despite the disturbing trends, there remains a declining but significant long-term development program and a dedicated core of staff committed to making investments in human capital the cornerstone of A.I.D.'s programs. The continuing debate about the course the Agency should follow is not yet decided, and it is thus the Task Force's hope that its report and recommendations can help shift back to longer-term initiatives that promote sustainable, broad-based economic development.

²⁷ State Department cable to all A.I.D. missions, November 18, 1991, Subject: "A.I.D.'s Policy Agenda."

5 The State of the Global Food and Agricultural Sector

This chapter is divided into six parts: 1) the potential contributions agriculture can make to the development of the general economy, 2) the gross misuse of agricultural resources globally, 3) the gross disparity in the levels of development between the agricultural and nonfarm sectors in most nations, 4) the connection between poverty and hunger, 5) the emergence of a global food and agricultural sector, and 6) the emergence of a global agricultural research system.

The Potential Contributions of Agriculture to General Economic Development

Almost all nations start the development process with a major share of their resources and economic activities in the agricultural sector. This is because of the importance of food and fiber to the general welfare, and the low productivity of the resources devoted to their production. Consumers in developing countries also dedicate a major share of income to the consumption of food and agricultural commodities. Their levels of per capita income are so low, owing to low labor productivity, that it takes most of their incomes to provide for their subsistence.

The nature of the development process is such that as productivity improves and per capita incomes rise, a smaller and smaller share of income is devoted to the consumption of food, and larger and larger shares are devoted to the production and consumption of non-farm goods and services. This is known as Engels' law, and it is one of the most powerful forces driving an economy as it experiences economic development and rising per capita income.

Associated with this shift in production and consumption patterns is a shift in resources among sectors. In response to normal economic forces, labor and capital tend to shift to the nonfarm sector where they produce the goods and services consumers demand as

their incomes rise. However, if measures are taken by the government to raise productivity in the food and agricultural sector, the shift of labor and capital can be accelerated. Fewer and fewer resources will be needed in the agricultural sector to meet the increasing demand for output from it.

Unfortunately, many developing countries have attempted to obtain this shift in resources by shifting relative prices against the agricultural sector by means of distortions in trade and exchange-rate policies. In effect, they have viewed agriculture as a sector to be exploited, with resources extracted from it, rather than as a sector to be developed in a way that releases resources naturally through increases in productivity.

Thus, we see the premature migration of millions of people from rural areas to urban centers in most developing countries and the premature diversion of capital from the agricultural sector for the development of the nonfarm sector. The eventual result is stagnating economic growth since the continued high cost of food production limits the growth in disposable incomes necessary for the desirable increase in market demand for nonfarm goods.

Agriculture makes other contributions to the development process in addition to the release of labor and capital for the development of the nonfarm sector. It is often a significant source of foreign exchange. This foreign exchange is a special form of capital that can be used to pay for imports of raw materials, capital goods needed for the development of the nonfarm sector, and consumer goods not produced domestically. It can also be used to service foreign debt acquired as a means of financing a higher rate of investment.

Agriculture also supplies food for the population that has shifted to nonfarm employment, an increasingly important contribution to general economic development as ever larger shares of the labor force and population are shifted to urban centers and to employment in the nonfarm sector. Agricultural productivity needs to rise on a sustained basis if it is to provide for this contribution on a sustained basis.

Finally, agriculture can be a market for goods and services produced in the nonfarm sector. This can be an important contribution to general economic development. The nonfarm sector cannot continue to grow unless it has expanding markets to absorb the increase in output. If agriculture is to play this important role, it is imperative that its per capita incomes rise and that modernization advance apace of that in the nonfarm sector.

As development proceeds, agriculture will at first demand an ever larger consumption bundle from the nonfarm sector. Later, as the process of modernization accelerates, agriculture will demand modern inputs such as commercial fertilizers, pesticides, and machinery and equipment from the nonfarm sector.

In short, these are the classical contributions of agriculture to the general economy: producing food for the growing nonfarm population, releasing labor for employment in the expanding nonfarm sectors, supplying capital for these sectors, earning foreign exchange, and providing a market for the goods and services produced in the nonfarm sector.

Agriculture can also make another, more general, contribution, especially if its development is promoted in such a way as to lower the real price of food by investing in agricultural research to produce new production technology for the sector.

The process is important as the basis of sound development policy. It works this way: The introduction of new production technology into agriculture raises resource productivity. The early adopters of the technology reap most of the benefits in the beginning since they lower their cost of production while the price of the commodity remains the same. However, as the new technology is adopted more generally, the total supply of the commodity tends to increase and the relative price decline (unless it is an export commodity and the country is relatively unimportant in the total trade of that commodity).

The effect of the decline in the real price of the commodity is to transfer the benefits of the new technology to consumers, at the relative expense of the producer. For consumers with given nominal incomes, a decline in the real price of food is equivalent to an increase in their real incomes.

This increase will be larger the more important the commodity is in the diet of the consumers and the larger the increase in productivity. The important feature of the process is that the benefits of the new technology tend to be distributed widely in the economy. Thus, the development of agriculture by investing in agricultural research on domestically consumed commodities becomes a means of raising incomes on a very large scale in the economy.

There is yet another important feature to this process.

Low-income consumers tend to spend a larger share of their income on food than do high-income consumers. Thus, low-income groups tend to benefit in a relative sense as the price of food commodities declines, especially if the prices decline for the commodities consumed by this group. This is a highly desirable feature of development policy. Not only are the benefits of development widely distributed in the economy, thus promoting more general expansion in the economy through positive demand effects, the distribution of income is improved as well.

In contrast, consider the case if the equivalent amount of development resources were concentrated on the development of the automobile industry. With low levels of per capita incomes for the economy as a whole, only a modest share of the consumers, the upper-income groups, would be users of automobiles and would thus tend to receive the benefits of the development effort.

The moral is that the importance of agriculture as the focal point of development policy has little to do with the number of farmers in the country. It has almost everything to do with the fact that everybody consumes food, and low-income consumers spend a larger share of their income on food than do upper-income consumers.

A related issue merits further discussion. Early critics of the Green Revolution in India and other parts of Asia charged that upper-income producers in agriculture tended to be the major beneficiaries of the new technology. That is true initially, since larger producers tend to be the first to adopt the new technology. But as the adoption of the technology spreads, the benefits shift to the consumers, and especially to low-income consumers.

Producers ultimately tend to bear the costs of such a development process since eventually competitive pressures are brought to bear on them. Some of them have to reorganize and get larger, and still others have to leave the sector and seek gainful employment in other sectors of the economy.

In those cases where a country's new production technology is introduced into the export sector, or into commodities that compete with imports, the price of the commodity will not tend to decline unless the country is a major factor in international markets.

Without the decline in the real price of the commodity, the direct-income benefits of the new technology remain with the producer and the consumer does not benefit. There are important indirect benefits, however. If new technology is introduced into the production of such commodities, the tendency is for these sub-sectors to become more competitive in international markets and thus to earn (or save) more foreign exchange for the nation. This increased foreign exchange will come from increased exports in the case of export commodities, and from foreign exchange savings in the case of commodities that compete with imports.

In either case, the increased supply of foreign exchange can be used either for imports of consumption goods or to finance a higher rate of economic development for the economy as a whole. The benefits will again tend to be widespread, although this will depend importantly on the kind of development policy pursued vis-a-vis the nonfarm sector. Higher rates of economic development make it possible to absorb a higher rate of out-migration from the agricultural sector, and thus to help raise per capita incomes in that sector.

To conclude, agriculture can contribute importantly to the development of the nonfarm sector. For it to do so in an efficient way, however, development resources have to be directed to the agricultural sector. The benefits of the development will be widespread in the economy since they will be realized in large part by consumers and not producers. Moreover, investing in the development of new agricultural technology tends to improve the distribution of income because lower-income consumers tend to benefit the most in a relative sense.

Gross Distortion in the Use of Agricultural Resources Globally

Gross distortions in the use of the world's agricultural resources involve gross inefficiencies in global resource use, significant losses in real income on a global scale, and additional demands on the world's underlying resource base that have pervasive deleterious environmental consequences.

These distortions are rooted in particular patterns of trade and exchange-rate policies in the developed and developing countries. The developed countries, especially the United States, the European Community, and Japan, tend to protect their food and agricultural sectors and to set the prices of their principal agricultural commodities above those prevailing in international markets. They do this by means of a variety of domestic commodity programs and protectionist measures set at the border to limit access to domestic markets.

The developing countries, in contrast, discriminate severely against their agricultural sector. They do this through a panoply of trade and exchange-rate policies, including the over-valuation of national currencies in foreign exchange-rate markets (an implicit export tax and an implicit import subsidy); the imposition of explicit export taxes, quotas, and embargoes on exports; and a wide variety of export licensing schemes which restrain exports.

The consequence of these policies is to dam up domestic production in the domestic market while at the same time subsidizing the imports of food. The result is to push domestic prices for the affected commodities significantly below those prevailing in international commodity markets.

The combination of these two sets of policies results in a gross inefficiency in the use of the world's agricultural resources.

Far too much of the world's food and agricultural output is produced in the developed countries, while far too little is produced in the developing countries. Inefficient use of resources results in the sacrifice of income on a global scale and slower rates of economic development for everybody. Inefficient resource use also increases the demand against natural resources to produce a given level of output, thus contributing to global environmental problems.

All nations could thus well invest substantial resources in an effort to reduce and eliminate these distortions in resource use. The United States took this as an objective and made it a cause celebre in the current Uruguay Round of Multilateral Trade Negotiations. At the time of this writing it appears that that effort has been a failure. In the interests of feeding the world's population and of promoting economic development generally, this objective should be pursued in other forums, and on a persistent basis.

The Disparity in Per Capita Incomes Between the Agricultural and Nonfarm Sectors

An important feature of economic development in almost all countries is the chronic disparity in per capita incomes between the agricultural and nonfarm sectors, with those in agriculture tending to lag behind those in the nonfarm sector. But while the disparity in the developed countries tends to be less than 10 percent to 20 percent, in the developing countries the average per capita incomes in the nonfarm sector tend to be two or three times larger than those in the agricultural sector.

The tendency of incomes in agriculture to lag behind those in the nonfarm sector is rooted in the character of demand and supply for agricultural commodities, in low labor productivity, and in the failures of development policies in almost all countries.

As noted in an earlier section of this chapter, it is the nature of the structure of demand that over time labor needs to be transferred from agriculture, which typically functions as the residual employer, to the nonfarm sector. The way this is done in a market economy is for wages to be higher in the sector of the economy that needs to attract resources and lower in the sector that is supplying the resources.

But if agriculture is developed by means that introduce modern, capital-intensive technology with its productivity-enhancing effects into the sector, the adjustment problem will be exacerbated (as more workers chase fewer jobs and wages continue to fall in agriculture), and the income disparity will tend to be larger. There is a chronic need to adjust labor into productive jobs out of agriculture if development takes place without such a wide income disparity.

Unfortunately, rather than to facilitate the adjustment process with policies that make migration easier, governments-- especially those in the developing countries--tend to ignore the adjustment problem. They under-invest in the education and training of their rural population, investments that would help to make labor more mobile. Moreover, they under-invest in the physical infrastructure of rural areas, making it unattractive for nonfarm activities to locate in rural areas where they could provide expanding employment opportunities close to the source of the potential migrants.

These failures of economic policy are made worse by the tendency of developing countries to discriminate against their food and agricultural sectors by shifting the domestic terms of trade against them.

Failure to invest at appropriate levels to increase the productivity of the rural population results in lost production from this population group. Reversing these policies can contribute importantly to accelerating the growth process and to raising per capita incomes generally in the economy.

Poverty and Hunger

An important share of the world's population suffers from malnutrition and hunger. While the share of the global population that finds itself in this state has declined over time, the absolute number continues to increase, in large part because of rapid population increases in the developing countries.²⁸

Unfortunately, the cause of malnutrition and hunger is all too frequently assumed to be a consequence of inadequate supply, with the result that supply-side solutions to the problem are prescribed. This comes about in part because the hunger and malnutrition problems are defined as a problem of food security. Solutions are therefore proposed in terms of carrying larger stocks, and pursuing food self-sufficiency policies.

Such policies are misguided, in large part because they are based on an incorrect definition of the problem. Problems of malnutrition and hunger are not rooted in lack of production. They are rooted in lack of income and poverty. As A. K. Sen noted some years ago, even the most severe famines in history had little to do with inadequate food supplies, but rather with a collapse in the incomes of the affected population groups.²⁹ In some cases, food prices actually declined at the height of the famine because of lack of effective demand.

The pursuit of food self-sufficiency as the means for dealing with the problems of malnutrition and hunger wastes resources and sacrifices economic growth.

The evidence for this can be found in the experience of a number of countries, but perhaps most importantly in the experience of India. That country has had a self-sufficiency goal for a number of years; and during the 1980s attained the goal on a number of occasions. But even so, and even with the accumulation of stocks and an increase in exports of food, hundreds of millions of Indian citizens nonetheless remained malnourished and suffering from hunger. The problem is that the process of becoming self-sufficient does little to address the underlying problem of poverty.

The other commonly recommended policy for dealing with the problem of food security--the carrying of larger stocks in the government's hands--similarly wastes resources. What is seldom recognized in this case is that carrying stocks is extremely costly. Not only

²⁸ For a comprehensive analysis of the connections between poverty and hunger, see Poverty and Hunger: Issues and Options for Food Security in Developing Countries. S. Reuttinger and J.vH. Pellekaan. Washington, D.C.: The World Bank. 1986.

²⁹ Poverty and Famine: An Essay on Entitlement and Deprivation. Oxford: Clarendon Press. 1981.

does the government have to invest large sums to acquire the stocks, it also has to pay the interest on the resources involved, invest in silos and warehouses to protect the stocks, suffer the losses from insects and deterioration in the stocks, and pay the transportation costs of assembling the stocks.

In addition, the management of the stocks is complicated, and in most cases policy makers do not have adequate information to know when to release them and in what quantities. Mistakes in this regard are once-and-for-all mistakes and cannot be undone.

A more efficient and effective policy for dealing with short-term problems of food security is to carry additional reserves of foreign exchange. When a shortfall in production occurs domestically due to weather or other disasters, the foreign exchange can be used to import the needed supplies. Shortfalls in agricultural production are seldom widespread on the international scene. They are typically offset by production in other countries that is above trend lines. Thus, supplies are usually available to be acquired when the need arises. An important side benefit of such a policy is that the additional foreign reserves can be invested in the international capital market and thus earn a rate of return when not being used. This is in sharp contrast to the cost of accumulating physical stocks and the tying up of capital in silos and warehouses.

Addressing the problem of malnutrition and hunger must be rooted in attempts to alleviate and reduce poverty. The solution to that problem is to promote more employment-oriented economic growth and development. If the United States is concerned about the problem of hunger and inadequately fed people, government efforts should be directed to solving the underlying poverty problem, and not to palliatives that have no lasting effects. Until the underlying poverty problem is solved, targeted feeding programs supported by programs of food aid can help improve the nutritional status of the affected groups on a temporary basis only.

The Emergence of a Global Food and Agriculture System

The period since the end of World War II has seen the emergence of a well-integrated food and agricultural system based on international trade. It is a significant accomplishment of the international community.

An important consequence of this system is that, except in cases associated with political problems, famines have virtually disappeared from the face of the earth. Shortfalls in production in one part of the world have tended to be offset by increases in production in other parts of the world. The disparities have been leveled out by means of international trade.

The exceptions to this general rule occur when for whatever reason governments do not want the international community to know that some parts of their population are hungry, or they let the problems be known only when it is too late to deal with the logistical efforts needed to get adequate supplies to the affected groups. The starving babies so common on television screens in recent years are a consequence of just such policies. Lack of available food was seldom the cause. Often, policy makers in the affected countries did not want the world to know about their domestic political failings.

The global food and agricultural system is still far from perfect. As noted in an earlier section, there are still significant barriers to trade that limit the transfer of food and agricultural commodities freely on international markets. But the progress in evolving a well-integrated food and agricultural system has been significant.

The challenge is to continue the evolution of the system so that producers have broader access to markets everywhere and consumers have access to supplies on a broader scale. This broadening of the markets will help to create more stable markets and thus make for more efficient use of the world's agricultural resources.

The Emergence of a Global Agricultural Research System

In addition to the emergence of a global food and agricultural system based on growth in international trade, an international system of agricultural research institutions is gradually emerging as well. An important linchpin in this system are the 13 International Agricultural Research Centers created by the international community since the mid-1960s.³⁰

This system was begun with the establishment of the International Rice Research Institute (IRRI) by the Ford and Rockefeller foundations. That was later followed by the establishment of the International Center for Corn and Wheat Improvement (CIMMYT) in Mexico, and a succession of other centers. These international centers are located strategically, mostly in the developing world, and are currently supported by the international community at a level of \$240 million a year. A recent initiative seeks to expand this system by adding four new centers that will focus on the management of irrigation systems, forestry issues, and other resource-based problems.

³⁰ For analysis of this system and its impact, see Science and Food: The CGIAR and Its Partners. J. R. Anderson, R. W. Herdt, and G. M. Scobie. Washington, D.C.: The World Bank, 1988. See also, Summary of International Agricultural Research Centers: A Study of Achievements and Potential. Consultative Group on International Agricultural Research (CGIAR). Washington, D.C.: The World Bank. 1985.

The developed countries of the world have long had effective systems of agricultural research. These systems have contributed importantly to the modernization of agriculture in those countries. More recently, the developing countries have begun to recognize the importance of having a domestic research capacity for new agricultural production technology. Agricultural research systems still tend to be sorely underdeveloped relative to the needs in these countries, however.

In addition to the various systems of agricultural research institutions, there are growing links among the components. Although the IRRI and the CIMMYT respectively are responsible for creating the miracle rices and wheats, an important mission of the international research centers is to work with the research systems in the developing countries and to help them develop their capacity.

The U.S. agricultural research system has also begun to forge important linkages with researchers in the developing countries. The programs known as CRSPs (Cooperative Research Support Programs), with help from BIFAD, and later BIFADEC, link researchers in U.S. agricultural research centers with researchers in the developing and other countries. The result has been the development of significant new production technologies.

Somewhat unexpectedly, this system has also resulted in the training of significant numbers of scientists for the developing countries. It has also resulted in significant transfers of new technology from other parts of the world back to the United States for the benefit of U.S. producers. In sum, it is an example of international cooperation and collaboration at its best.

There is much to be done to develop this system further. In the first place, the capacity for social science research in the system is rather limited. Consequently, the crushing social problems in the developing countries go largely undiagnosed and unresolved. In addition, there is limited capacity to analyze and evaluate the effects of economic policies that could promote more rapid rates of economic development.

Given the location-specific nature of agricultural technology, an effective agricultural research station is needed for each ecological region of the world. We are far from having such a comprehensive system. We are also far from having the various components of the system linked together so as to share knowledge and exchange information for the benefits of humankind. Until the emergence of the CRSPs, the U.S. system for capturing the benefits of research and development in other parts of the world was sorely inadequate. The system now in place is only a start on what is, or will be, needed.

Challenges Facing the System

The global food and agricultural system faces a number of important challenges--from the demand side as well as from the supply side.

On the demand side, population continues to grow at a rapid rate in the developing countries, where most of the world's population is located. Moreover, that growth is on top of a base that is growing ever larger. The world's population is expected to grow by approximately another billion people by the end of this decade.

Demand will be further stimulated by increases in per capita income, again especially in the developing countries. Many countries that experienced economic decline and stagnation during the 1980s can expect to see rapid recovery in the 1990s. The elasticity of demand in these countries is relatively high. Given their population growth rates and realistic expectations for increases in per capita incomes, aggregate increases in demand for food on the order of 4 percent or better is likely in many countries, some of which have large populations.

The problem is that a corresponding growth rate of 4 percent has seldom been attained for agriculture on a sustained basis, in any country. Moreover, as the world looks to future increases in food and agricultural output, an even larger share of those increases will have to come from increases in the productivity of land. Contrary to the past, there are no large amounts of land to be brought readily under cultivation. Any available uncultivated land will come into production only at a rising supply price, in some cases requiring significant investments in physical infrastructure, and in other cases at significant environmental risks.

Ruttan³¹ has recently conducted an ambitious study of the constraints to obtaining sustainable increases in agricultural production into the 21st century (1991). He emphasizes the fact that future gains in agricultural production will be obtained with much greater difficulty than in the immediate past.

Among the factors he cites are: Incremental response to fertilizer use has declined; expansion of irrigated areas has become more costly; institutional research capacity is limited and even declining in many developing countries; increasing the genetic yield potential for cereals has become even more difficult; and resource and environmental restraints limit growth in agricultural production.

In order to deal with these problems, Ruttan calls for a reorientation in the way agricultural research is organized in order to realize the opportunities in microbiology and biochemistry; intensified efforts to institutionalize agricultural research capacity in the developing countries; and the establishment of substantial basic biological research and training capacity in the tropical developing countries.

³¹Ruttan, V. W. 1991. "Constraints on Sustainable Growth in Agricultural Production into the 21st Century," St. Paul: University of Minnesota, Department of Agricultural and Applied Economics, May 1991.

To address resource and environmental constraints on sustainable growth, Ruttan suggests that a major research program on incentive-compatible institutional designs be initiated; that the capacity to monitor agricultural sources and impacts of environmental change be strengthened; that technologies and institutions to achieve more efficient management of surface and groundwater resources be designed; and that research on environmentally compatible farming systems be intensified.

These recommendations focus on research and institutional design, issues the Task Force emphasizes in its recommendations (chapter 8). Ruttan also calls attention to the health constraints on agricultural development, especially in the developing countries. He suggests that more effective bridges be built in research and in practice, between the agricultural and health communities.

Concluding Comments

The global food and agricultural system is becoming truly internationalized. Much progress has been made in linking up the food and agricultural sectors in national economies. Important components of a global agricultural research system are now in place.

However, barriers to trade are still a prominent feature of the international system. Significant efforts and investments are still needed to develop an adequate system to produce sustained improvements in the technology for a modern agriculture. The institutional capacity for social science research and for policy analysis is also sorely inadequate at the international level, and at the state, province, or local level.

Labor productivity and per capita incomes in the agricultural sector persistently lag behind those in the nonfarm sectors, contributing to grossly inequitable distributions of income and the sacrifice of significant amounts of output. In addition, most countries are characterized by massive poverty in their agricultural sectors, largely associated with the low levels of productivity.

Finally, malnutrition and hunger are still far too pervasive on the international scene, especially since we know how to eliminate them and would have the resources to do so if the political will could be mustered.

6 The Modern Paradigm for Agricultural and Rural Development

An effective program of international assistance and collaboration must be based on sound economic development policies. Over the last two decades an unusual consensus has emerged on how to promote economic development successfully, especially agricultural development.

This chapter is devoted to a synthesis of that emerging perspective. Topics covered include: 1) the policy setting, 2) the critical role of new production technology, 3) the importance of other forms of human capital, 4) the role of the physical infrastructure, 5) the need for viable institutions, 6) the importance of decentralizing the development process, and 7) realizing the complementarities between development abroad and development at home.

The Policy Setting

Events of recent years have reconfirmed the importance of depending on free markets as the means of organizing economic activities. The poor performance of the centrally-planned economies has forcefully demonstrated that central planning and state ownership of resources do not result in sustainable and efficient economic growth. Moreover, economies organized in this way have caused significant damage to the environment and probably have the poorest chance of experiencing sustainable economic development.

An important implication of this lesson is that nations interested in promoting efficient economic growth must open their economies to the forces from the international economy. This means that protectionist measures must be reduced to minimal levels, and the producer sector of the economy be allowed to produce to its comparative advantage.

The newly industrialized countries (NICs) of Asia demonstrate how successful such policies can be. The failures in economic performance by countries that have pursued

import-substituting industrialization policies behind protectionist barriers carry the same lesson as do the failure of development strategies that rely on protection for infant industry. Development policies based on such strategies create their own vested interests in the protectionist policies, with the result that the infant is never permitted to grow up.

In addition to allowing the producer sector to play to its respective comparative advantages, a market economy open to the international economy with minimal protectionist measures also allows consumers to exercise their sovereignty in multiple markets, both at home and in the international economy. This exercise of consumer sovereignty puts healthy competitive pressures on domestic industries and induces them to seek and adopt efficient production practices as a matter of survival.

Another implication of the lesson that a market economy connected to the international economy is best is that free trade policies stimulate a pattern of balanced growth which generally gives the best result. Given that most of the resources in low-income countries are in agriculture, this sector should normally receive priority attention in efforts to promote economic development.

This is not an argument for an agriculture-first development policy. It is rather an argument that the urban bias in past development policies of developing countries, and which now seems to be becoming prominent in bilateral and multilateral development agencies, has been unproductive.

The challenge of policy makers is to carry out those measures that will raise the productivity of resources where they are presently located, and at the same time encourage the development of new economic activities that follow from the rise in per capita incomes and that are consistent with the nation's current or emerging comparative advantage.

This perspective does not imply that comparative advantage is something immutable, something that policy makers can do nothing about. We know that nations can and do alter their comparative advantage, and that they do this to their considerable benefit. However, the sound way to do this is not by protectionist measures but by investing in those activities that raise resource productivity.

Finally, depending on markets to organize the economic activities of a nation does not mean that there is not a role for government or for the public sector. To the contrary, there are very important roles for the public sector, and generally these are critical to the success of the private sector.

There are a number of activities the private sector will not undertake, or will undertake at less than socially optimal levels, largely because they will not be able to capture the full benefits of their investments. Such activities include basic research, some kinds of applied research, certain kinds of education and training, health care, the collection of data

on the performance of the economy, the regulatory framework necessary to make markets work efficiently, and the physical infrastructure for the economy.

It is these public sector activities that will be discussed in the following sections of this chapter.

The Critical Role of New Production Technology

Perhaps the most important insight of the past quarter century in terms of knowing how to promote agricultural development has been the realization of the critical role of new production technology. Nobel Laureate Theodore W. Schultz made this the clarion call of his book, Transforming Traditional Agriculture, which was published in 1964 and which was an important basis of his receiving the Nobel Prize in Economics.³² Hayami and Ruttan, in their path-breaking study Agricultural Development: An International Perspective, first published in 1971, carried this theme an important step forward.³³

The importance of new production technology for agriculture as a means of producing economic development whose benefits are widely distributed in the economy, and generally in favor of the poor, has already been emphasized. Both of these characteristics of new agricultural technology provide the basis for a development process that will be self-sustaining.

Equally as important, the social rates of return to investments in agricultural research are quite high, and with few exceptions, extraordinarily high. Moreover, those cases in which the rates are low or negative are due to subsidized imports (as in the case of food aid), which annul the benefits of local research. Finding higher rates of return on alternative investments is rare. The significance of these high rates of return is that investment in agricultural research is a cheap source of economic growth. That is just what policy makers should be searching for.

Hayami and Ruttan provide useful insights on the importance of developing the capacity to generate this new production technology.

In the first place, they differentiate between biological and chemical technologies, which enhance the productivity of land, and mechanical technologies, which enhance the productivity of labor.

³² New Haven: Yale University Press.

³³. Yujiro Hayami and Vernon W. Ruttan. Baltimore: Johns Hopkins University Press. 1971 and revised in 1985.

Second, by drawing on the agricultural development experience of Japan and the United States, they note that the choice between these two kinds of technology depends on the relative resource scarcity the particular economy faces. Land-scarce countries such as Japan traditionally concentrated on biological and chemical technologies, which raised the productivity of land, while labor-scarce countries such as the United States traditionally concentrated on mechanical innovations, which raised the productivity of labor. In both countries, the emphasis later shifted as relative resource scarcity changed over time.

Another insight from Hayami and Ruttan was that biological innovations tend to be highly location-specific. Biological innovations (improved varieties) that raise the yields of crops, for example, have to be adapted to local ecological conditions and to local resource scarcity.

Thus, to have an adequate agricultural research system, a nation (and the world, by implication) needs an agricultural research station in each ecological zone. This suggests that such biological innovations are not transferable from one part of the world to another.

The same does not apply to mechanical innovations. Most tractors and farm equipment can be transferred from one part of the world to another, recognizing the need to tailor them to local farm size and slopes of hills.

A final example from Hayami and Ruttan was that much of the capacity for biological research has to be in the public sector. An improved variety that can be reproduced by any farmer and sold or given to his or her neighbor, provides little incentive for private companies to produce such improved varieties. There are important exceptions, of course, such as hybrid varieties, which do not reproduce themselves. In those cases, the private sector can capture the returns from their investments and thus play an important role in developing such varieties.

In effect, a symbiotic relationship develops between the private and public sector. In the case of hybrid corn, for example, the public sector developed the inbred lines needed to produce the hybrids, but the private companies made the crosses and sold the resulting hybrids.

In contrast to the new technology that the biological and physical research produces, social science research produces information for policy makers and private decision makers, with new institutional arrangements being its counterpart to the new production technology of the biological and physical scientists. A major share of social science research needs to be in the public sector since for the most part it does not result in patentable innovations or knowledge that can be sold.

Finally, patents and other institutional arrangements that protect the intellectual property rights of those creating new innovations and technology for agriculture are essential

if the private sector is to be encouraged to invest in research for the modernization of agriculture.

In conclusion, the establishment of a system of agricultural research initiatives is an essential ingredient for promoting agricultural development to produce the biological innovations and the social science research the private sector will not produce, or in which it will not invest at socially acceptable levels. In addition, institutional arrangements that protect intellectual property rights are also needed³⁴.

Other Forms of Human Capital

New production technology is not the only form of human capital vital to agricultural development. Education is another form of such capital, one that is complementary to the new production technology. All levels of education are important, and have a number of important roles to play in the development process. Graduate training programs are critical to producing the scientists needed to do the biological, physical, and social science research. These scientists must be educated in ways relevant to the problems of the society, and to make the research system self-sustaining. The capacity for undergraduate education is needed to train the cadre for a modern agricultural sector. Primary and secondary education are essential in helping raise the productivity of the labor force, and in developing the cognitive skills needed to decode the technology made available to the agricultural sector.

Education and training play another important role in agricultural development. They are a critical factor in making the agricultural labor force more mobile, thus facilitating the adjustment of the labor force out of agriculture as economic development proceeds. In this role they help raise per capita incomes in the agricultural sector, reducing the disparity between the agricultural and nonfarm sectors. They thus help distribute the benefits of economic development broadly in the economy and promote a higher rate of expansion of the nonfarm sector.

Still another form of human capital is the health status of the population. Improved health raises the productivity of the labor force in a physical sense. This is important in agriculture, where many of the labor activities are physically demanding. Improved health also sharpens cognitive skills and helps improve decision-making. There are important social dimensions to health care, since poor health is a risk to all citizens, with many diseases contagious and highly transferable.

³⁴ For further discussion of the critical role of technology, see "Assessing Prospects for Productivity Increases in Food Production", a paper by Donald Plucknett, commissioned by the Task Force.

Unfortunately, in most countries both the level of educational attainment and the quality and availability of health care are much inferior in the agricultural and rural sector to that in the urban sector. This contributes to the disparity in incomes between the two sectors, and to disparities in the rates of development.

Another form of human capital is the nutritional status of the population. Inadequate nutrition lowers the productivity of the worker and dulls his or her cognitive skills. It also contributes to poor health. In the case of children and youth, malnutrition lowers their ability to learn and to develop their cognitive skills. Investments in adequate nutrition can have a high payoff in raising the productivity of the labor force, both in the short and in the long term.

The high degree of complementarity in investing in the various forms of human capital is important to note. Improved nutrition is highly complementary to good health, and both are highly complementary to education. Education, in turn, is highly complementary to new production technology. Thus, if policy makers want to realize the highest returns possible on their investments in any form of human capital, they should invest at socially optimal levels in all forms.

The Role of the Physical Infrastructure

Physical infrastructure is essential to a vital economy. It is especially important to agriculture given its geographic dispersion. Commodities must be transported long distances to consumers, and modern inputs have to be transported from urban-industrial centers to the widely dispersed farms. In addition, farm families must have access to the goods and services that make up their consumption bundle if they are to have potential standards of living comparable to their urban counterparts, and therefore sufficient incentives to invest resources in higher production.

Governments in most countries tend to under-invest in the physical infrastructure serving the agricultural and rural sectors. In some parts of the developing world, such as Africa and certain parts of Latin America, the deficiencies of the rural infrastructure are especially great. Development of the agricultural sector simply will not take place without an adequate physical infrastructure.

Much is made in the current rhetoric surrounding foreign economic assistance of the need to provide such assistance directly to the private sector and not to the government or public sector. Such rhetoric is somewhat misguided, although the implied point that markets should be given a greater role in such countries is well taken.

The important point is that public investments are essential ingredients of a market economy and are important forms of support and subsidy to the private sector. It is true in the case of the capability to produce new production technology for agriculture. It is true in

the physical infrastructure for agriculture. In the section that follows we will see that it is also true in the case of the institutional infrastructure for a modern agriculture.

The Institutional Infrastructure

Institutions and institutional arrangements are also essential ingredients of a modern economy.

Institutions are the means by which individuals relate to each other in a society. They refer to the rules and codes by means of which citizens conduct their daily social, economic, and political intercourse. They range all the way from the social institution of marriage, legal systems to protect human rights, police and fire protection systems, rules by which private contracts are enforced and markets work, private property rights, and riparian rights that govern the use of surface water. Clearly, most such institutions need to be in the public sector.

At a somewhat different level, there are all the institutional arrangements implied by the discussion in earlier sections of this chapter. These include agricultural research systems, educational systems, health care delivery systems, and family planning systems. The development of these systems is an important challenge to policy makers. They demand a special kind of creativity, especially in the need to adapt the institutional arrangements to local conditions and to change them in response to changing conditions as economic development proceeds. Such institutional development has to be an important component of any economic development effort.

The challenge of viable institutional arrangements has been brought sharply to the fore in the attempts of the formerly centrally-planned countries to shift to market economies. The difficulties have been great, in part because of the failure to understand what activities need to remain in the public sector and which institutional arrangements are essential for a private market economy. Help in designing and developing new institutional arrangements may be as important as, or more important than, actual transfers of financial capital.

Decentralizing the Development Process

The excessive concentration of economic activities in large urban-industrial centers is an important feature of economic development as experienced in most countries. Labor is drained out of agriculture and concentrated in urban agglomerations. In many countries, more than 50 percent of the nation's population is concentrated in the capital city.

A certain amount of this concentration is natural. Industrial and service activities tend to be highly complementary to each other and there are thus economic benefits from a close geographic concentration. However, the high level of concentration imposes high social

costs in providing the physical infrastructure for such concentrations and creates negative externalities associated with such problems as high levels of pollution and time lost in moving about in congested streets. In such a setting, expansion of economic activities is extremely costly to society.

Importantly, these are not the only costs associated with such a development pattern. Negative externalities are also imposed in rural areas when labor migrates to urban centers. Such migration tends to be highly selective, including the young, the more vital and entrepreneurial, and the better educated. The migratory process thus tends to drain the human capital from the rural areas. In addition, the migrants tend to take whatever physical capital they have with them.

The exodus of human capital from the rural areas imposes negative externalities on those areas³⁵ similar to the losses recognized in the brain-drain literature when the brightest and best migrate to, or remain in, the developed countries after they have received their higher education there. The rural exodus leaves a weak base for developing other economic activities in rural areas, and is another reason why the incomes of rural people tend to lag behind those in urban centers.

Despite the natural complementarities of industrial and service activities, there is no economic reason why the concentration of economic activities has to be so great as has occurred in many developing countries. There are sound economic reasons for the development process to result in a different geographic configuration.

If the negative externalities in both the urban centers and the rural areas are as large as they appear to be, considerable sums could profitably be spent in reversing or reducing the tendency toward concentration. Such efforts do not require a heavy interventionist hand on the part of government nor the need to prejudge where particular nonfarm activities should be geographically located.

For one thing, much of the existing concentration is due to government subsidies, both implicit and explicit, to locate in large urban centers. Those subsidies should be drastically reduced or eliminated. In addition, shifting resources from the construction of physical infrastructure in urban centers to improving the physical infrastructure in rural areas will make the latter a more attractive place for the industrial firms to locate. And because agricultural activities are inherently part-time jobs in most countries, the decentralization of the industrialization process to rural areas will help make more efficient use of the agricultural labor force by providing nonfarm jobs.

³⁵For a comprehensive discussion of this issue, see G. Edward Schuh, "Out-Migration, Rural Productivity, and the Distribution of Income" in Migration and the Labor Market in Developing Countries, ed R.H. Sabot. Boulder, Colo: Westview Press. 1982.

In most countries that have already experienced economic development, the labor force must bear most of the costs of adjusting to changing economic conditions. They bear these costs by dislocating their families from familiar surroundings and settling in unfamiliar urban surroundings. There is no reason why this is inevitable. By decentralizing the industrialization process, the costs of adjustment are spread more equitably in society, the negative externalities associated with the development process are reduced, thus providing a more efficient development process and making for a more efficient labor market.

Realizing the Complementarities Between Development Abroad and Development at Home

The United States has long viewed itself as Fortress America. It has long been a large, self-contained economy, and for the most part self-sufficient. Moreover, for most of its history it has been strongly isolationist.

Such a perspective is no longer appropriate and does not serve well our national interests. The relative importance of the U.S. economy in the global economy has declined significantly since the end of World War II. It is no longer the scientific and technological leader of the world. It is increasingly dependent on other countries for raw materials critical to its own economic development. It suffers from environmental damage coming from other places in the world. And increasingly it must live by its wits.

In such a changed situation, the United States has an enormous latent demand for knowledge on the rest of the world. It must increasingly capture the new knowledge that is being produced in other parts of the world if it is to keep pace with countries experiencing rapid economic development. And if it is to establish friendly and constructive relations with other countries, it must forge collaborative arrangements on mutually important activities. Its foreign assistance programs can be a vital means of establishing such collaborative arrangements.

Concluding Comments

The emerging consensus on how to promote agricultural development focuses on the critical role of the capacity to produce new production technology for agriculture on a sustained basis; on the importance of investing in other forms of human capital such as education, good health, and adequate nutrition; on the institutional arrangements needed for a market economy; and on an adequate physical infrastructure. Decentralizing the industrialization process will make for a more equitable and efficient development process. The challenge to the United States is to protect its position in the world. Its foreign aid program can be an important means of promoting economic development generally for the mutual benefit of the United States and the countries with which it collaborates.

7 A New Paradigm for this Nation's Foreign Economic Assistance Program

There seems to be near unanimous agreement that this nation's foreign aid programs have not kept pace with the enormous changes in the world and even with our own evolving self interests. The old rationale based on containment of communism is no longer valid and the new world order, and the U.S. role in it, has not yet taken shape.

For these and many other reasons, minor corrections or fine tuning will not suffice. A new paradigm is needed to underpin programs of the future, one that can be understood and one that can serve U.S. interests. This chapter describes the key elements of a new paradigm that the Task Force believes will meet these tests.

The first step in revitalizing this nation's foreign economic assistance program is to establish a new rationale for it. The second step is to define our comparative advantage in providing such assistance. And the third is to put our assistance programs on the basis of truly collaborative arrangements with other countries. The remainder of this chapter addresses these issues.

A New Rationale for Foreign Aid

Because of widely held values, the United States will continue to provide humanitarian aid in times of natural and other disasters in foreign countries. Despite the decline in political support for government-to-government or institutional foreign assistance, the U.S. citizenry has always responded positively to calls for assistance when such disasters

occur. Moreover, it is willing to give privately for such purposes even when the government is also responding through its foreign aid program.

But the U.S. economic assistance programs need to go beyond humanitarian objectives. They need to be based on a clear articulation of our own best economic and political interests. They need to be rooted more soundly in the changes in the international economy over the past 30 years. And they need to be articulated realistically in terms of achievable goals.

Serve U.S. Interests

To begin, the new paradigm needs to state clearly that we are interested in the development of the developing countries and the former countries of Eastern Europe and the republics of the former Soviet Union because it is in our best interests to do so. This articulation needs to state clearly that we know our future markets lie in these countries, and that increasingly a larger supply of the raw materials we need for our own economic activities will come from these countries.

Such an articulation has two important benefits. First, it will help us to define our programs more effectively to promote economic growth, and to manage our resources more effectively to that end. Second, a more candid approach will help our efforts to be more constructively received by the collaborating country.

In the case of the countries of Eastern Europe and the republics of the former Soviet Union, our goals need to be more short-term-oriented, and designed primarily to facilitate the difficult transition from centrally-planned economies and authoritarian governments to market-oriented economics and more democratic societies.

The evidence is accumulating rapidly that neither of these transitions is easy. Moreover, the ability to sustain the political openness will be determined in large part by the ability to make the economic transitions to freer economies. Ultimately, this nation will benefit from smooth and rapid transitions to market economies and to democratic societies.

Reflect Changed International Economy

The new paradigm must recognize that the international economy has changed enormously over the last several decades and that our economic assistance programs need to reflect that reality. Among other things this means that we recognize that there is now a well developed international capital market that can mobilize savings for the developing countries if they pursue sound economic development policies.

In addition, we need to recognize that balance-of-payment support in most cases is counterproductive since it merely enables countries to delay the day they change their misguided economic policies.

Finally, we need to recognize that with a flexible exchange-rate system, large capital inflows can be counterproductive since they will give the recipient country a case of the "Dutch disease" which results in a rise in the value of its currency in foreign exchange markets.³⁶ These propositions mean that it is the quality of the capital we provide that is important and not the amount. Emphasis on the quality of our capital will have very positive features when negotiating the size of the aid flows.

Invest in Human Capital

The new paradigm must recognize that the international capital market is not likely to be a viable source of funding for human capital investment in the developing countries. For one thing, the gestation period is too long. Moreover, private commercial banks are in a weak negotiating position when they try to claim payments on loans that have been dedicated to such investments as education, health systems, and institutional arrangements. The benefits of such investments tend to be diffuse and far into the future.

The bulk of this nation's foreign economic assistance should be dedicated to investments in human capital, where the private international capital market is not likely to provide adequate resource flows. As noted earlier, these are the investments which in the longer term have high social rates of return.

Collaborative Research and Education

Investing in collaborative research and educational efforts has a high payoff to our own society. This nation desperately needs a stronger knowledge base on the rest of the world. It also needs to gain access to the new technology which spills out from growing research and development efforts in other countries. It can accomplish both of these goals by significantly expanding its collaborative research programs with educational and research centers in other countries.

The benefits of collaborative educational programs with other countries can also redound significantly to the United States.

³⁶ Uma Lele's study, Aid to African Agriculture: Lessons from Donor Experience, makes this point very clearly. Baltimore and London: Johns Hopkins Univ. Press. 1992.

Students from other countries can be important assets in U.S. educational institutions if their skills are properly taken advantage of while they are in this country. Faculty exchanges can play a similarly important role, with the U.S. faculty member learning a great deal about the country in which he or she works, and the visiting professor in U.S. teaching institutions also teaching about his or her own country, while also learning about us.

In addition, providing educational services to students from abroad is essentially the export of a service. This country desperately needs foreign exchange. Providing educational services to other nations is one way of earning it.

Collaborative ventures in health care similarly have mutual benefits. There is much to be learned about diseases and parasites in other countries. Some of these may eventually find their way to this country, as the experience with AIDS has indicated. If, in developing these collaborative arrangements, improved health care in the other country should result, U.S. citizens will experience lower risk from infection when traveling abroad, and from diseases brought to this country from abroad.

There are similar benefits from collaborating on the solution of environmental problems. These problems now have important international dimensions. We need to know more about global warming, for example, if we are to develop a sound strategy to deal with it, or if we are to devise proper strategies to forestall it.

Experience has already taught us that although we may be important contributors to such problems as acid rain, the disappearance of the ozone layer, and global warming, the solution to these problems will not be found in what we do here at home. The same applies to efforts to preserve biodiversity. Equally as important, we can learn from others by participating in collaborative efforts to address such environmental problems.

Adopt a New Perspective

Many of the terms used to describe programs of the past have no place in the new paradigm. The words "aid" and "assistance" should be purged from our lexicon. Our economic assistance programs should be described as international collaboration efforts, recognizing that the U.S. benefits as well as the collaborating country.

International cooperation was the phrase this nation used to describe its international endeavors in support of other countries in the immediate post-World War II period. For some reason that concept disappeared from our way of thinking about these efforts. We need to return it to common usage.

Utilize Food Aid

Given that the United States and the countries of the European Community are likely to continue to run surpluses from their agricultural sector into the decade ahead, we should find ways to make more effective use of these surpluses in our programs of foreign economic collaboration.

One way to do that is to establish a goal, together with the other industrialized countries, to significantly reduce hunger and malnutrition from the face of the earth. This is a feasible goal; the main thing lacking is political will. By raising the nutrition and health of affected populations, the elimination of hunger and malnutrition would make a significant contribution to raising resource productivity globally. In chapter 8 we will explain how targeted feeding programs can also help raise educational attainment among low-income groups.

The U.S. Comparative Advantage in Providing Development Assistance

Countries have differing comparative advantages in providing foreign economic assistance. Japan, for example, with its high savings rate and large surplus on its trade accounts, is a logical candidate to provide large capital flows to the developing countries.

The United States has quite low domestic savings rates and a large deficit on its balance of payments. It is consequently a large importer of capital, and is likely to continue so as long as it fails to balance its federal budget. Thus it is not to the comparative advantage of the United States to provide large capital flows to the developing countries.

On the other hand, it does have comparative advantages in its well developed educational system, its past experience with successful economic development, and its experience with a democratic form of government. Even though the United States has lost its scientific and technological leadership in many fields, it still leads the world in the expenditures it makes on science and technology, and it has vital and robust educational institutions. Thus, extending the services of these institutions in truly collaborative endeavors plays to our comparative advantages in providing development assistance.³⁷

³⁷The United States, more than any other industrialized country, has depended on its universities to play an important role in its foreign aid program. This is probably a consequence, at least in part, of the major importance given to foreign aid by President Truman's Point IV program. It is also a reflection, however, of the willingness of U.S. universities to be collaborating partners in these endeavors. For detail on the history of this relationship, see Brian Jordahl and Vernon W. Ruttan, Universities and AID: A History of Their Partnership in Technical Assistance for Developing Countries. Staff Paper P91-32, Department of Agricultural and Applied Economics, University

Uma Lele, a member of the Task Force, a native of India, and a long-time employee of the World Bank, repeatedly reminded members of the Task Force that the U.S. comparative advantage in collaborating with the developing countries lies overwhelmingly in its universities. This conclusion is derived from her ambitious study of foreign aid in Africa.³⁸

The United States is also generally viewed as one of the most well-developed countries in the world. It has already advanced far down the development path. It has experience with the kind of institutional arrangements needed at various stages of development. It can share this experience and knowledge with other countries while at the same time drawing on their experience and knowledge in learning how to deal with pressing social problems here at home.

Finally, the U.S. has had two centuries of experience with a democratic form of government. It has a vast storehouse of knowledge to draw on in assisting countries that want to establish democratic forms of government.

This will be a delicate endeavor under the best of circumstances. However, if we succeed in changing our posture from a patron/client relationship to collaboration and cooperation, we greatly improve our chances of having a significant influence on the spread of democratic forms of government worldwide.

The challenge will be to recognize that political institutions must be adapted to local culture and mores and sensitive to historical arrangements. A further challenge is to recognize that helping develop viable political institutions is significantly more complex than operating in an already-established system.

Mutual Self-Interests; Mutual Benefits

Successful efforts at international cooperation and collaboration require that there be truly mutual self-interests and benefits. This nation's future programs of international cooperation need to be articulated in that way to the domestic body politic and to the collaborating country. If they are, domestic support will be attained and collaborating countries will also be more likely to participate.

Concluding Comments

of Minnesota, St. Paul. July 1991.

³⁸ AID to African Agriculture: Lessons from Two Decades of Donor Experience. Washington, D.C.: World Bank. 1992.

A new paradigm for this nation's foreign economic assistance programs is needed if we are to design programs that are in our best interest, if we are to develop the domestic political support needed to sustain them, and if we are to engage other countries in a truly collaborative effort. The new rationale and paradigm should indicate that we have a self interest in such programs, that the quality of the resources transferred is more important than the quantity, that we are interested in truly collaborative efforts, and that these programs should be of mutual benefit to the collaborating countries.

8 Recommendations for Revitalizing the United States Economic Assistance Program

The recommendations of the Task Force for revitalizing this nation's foreign economic assistance program are based on an emerging consensus in the development community on how to promote agricultural and general economic development. They also take into account the significant developments in the international economy over the last several decades.

The chapter is divided into eight parts, with accompanying Task Force recommendations: 1) promoting freer trade and policy reform, 2) building the political coalition for international economic cooperation, 3) revitalizing program priorities, 4) making more effective use of food aid, 5) strengthening the Agency for International Development, 6) internationalizing U.S. universities, 7) strengthening the U.S. Department of Agriculture and other government agencies, and 8) making more effective use of economic assistance.

Promoting Freer Trade and Policy Reform

Task Force Recommendation:

The United States revitalize its commitment to free trade and re-establish its leadership role in trade liberalization as an important means of promoting broad-based economic growth in the international economy.

Although foreign aid can be an effective means of promoting economic growth in the developing countries, it has the disadvantage of transferring capital from one country to another and thus possibly reducing the rate of economic growth in the country supplying the capital.

A more effective way of promoting economic growth on a broad base is to promote international trade by means of trade liberalization. International trade has grown at an unprecedented rate since the end of World War II. In part because of that growth, the economies of developing countries, with the exception of Africa and Latin America in the

1980s, have similarly grown at unprecedented rates. Those developing countries more open to trade (often referred to as the newly industrialized countries--the NICs) have experienced the more rapid rates of economic growth.

The United States has played an important leadership role in promoting trade liberalization and freer trade, although that leadership waned during the 1980s and into the early 1990s as a consequence of persistent deficits on the U.S. trade accounts. These deficits are in turn a consequence of the need to borrow on international capital markets to finance a large federal deficit. The resulting inflows of capital create a strong dollar, contributing to the trade deficit.

If it is to renew its leadership role in promoting free trade, the United States needs to get its economic house in order. As long as the dollar is overvalued as the result of contradictory monetary (restrictive) and fiscal (stimulative) policies, the United States will have persistent and strong domestic political pressures to be more protectionist of its domestic economy. Under those circumstances, the United States is no longer a credible promoter and defender of freer trade, as the Uruguay round of multilateral trade negotiations recently demonstrated.

Distortions in domestic policies are another important motivation for protectionist measures. For example, the political commitment to support domestic agricultural prices above what would otherwise be market-clearing levels in the European Community, Japan, and the United States leads to measures that protect domestic agriculture.³⁹

Similarly, the desire to pursue import-substituting industrialization policies in the developing countries leads to high levels of protection for the manufacturing sector in those countries, plus other protectionist measures that limit the access of their farmers to international markets. Over-valued currencies in the developing countries also lead to protectionist pressures since they constitute implicit subsidies on imports.

Reform of domestic economic policies and the establishment of realistic exchange rates are essential if freer international trade is to emerge. The United States can help the developing countries undertake needed reforms in economic policy through its international collaborative programs. In addition, foreign economic assistance can promote an expansion of international trade by promoting more rapid rates of growth in the developing countries. Freer trade promotes economic growth by expanding income-earning opportunities. But

³⁹In the case of the European Community and the United States, such supports have also led to dumping of domestic surpluses abroad, to the detriment of many developing countries.

economic growth also promotes an expansion in international trade by expanding the range of goods and services demanded as per capita incomes rise.⁴⁰

The key to being able to play such a leadership role will be for the United States to get its own economic house in order. Balancing its own budget is a crucial step. A balanced budget will reduce the drain on capital markets, lower interest rates, and reduce and potentially eliminate the overvaluation of the dollar.

Getting its own economic house in order will make the United States a more credible proponent of policy reform in other countries. It will reduce the pressures for protection at home. And it will help generate the foreign exchange needed to carry out an effective program of international cooperation.

Building the Political Coalition for International Economic Cooperation

Task Force Recommendation:

The Agency for International Development develop programs that will attract the support of the various constituent groups. Leaders in the private and nonprofit sector, especially in the colleges and universities, are encouraged to help build a coalition that will provide sustained political support for programs so obviously in their interest.

The leadership for U.S. domestic support of foreign economic assistance programs has for the most part come from the political arena, not from broad-based, grass-roots movements. National leaders who have promoted foreign economic assistance include George C. Marshall in the case of the Marshall Plan, Harry S. Truman in the case of the Point IV program, and John F. Kennedy, especially in the Alliance for Progress in Latin America.

While there is always a swelling of grass-roots support for humanitarian aid in times of disaster, sustained domestic support for foreign economic assistance programs has come primarily from three sources: U.S. universities, through their interest in institutional development programs and their interest in international affairs; the Private Voluntary Organizations; and humanitarian interest groups.

There is currently an opportunity to build a broad-based, sustainable coalition in support of international cooperation. This potential coalition arises in part from the growing

⁴⁰ For a more comprehensive treatment of trade issues, see D. Gale Johnson, "Trade, Aid, and Economic Development: Public Policy Choices," paper commissioned for the study, 1991.

recognition among important groups in this country that the world is becoming increasingly globalized and that in many cases what happens here at home is rooted in developments abroad. It also arises out of growing interest in international issues among certain domestic interest groups.

The first and perhaps most widespread of these domestic interest groups is the U.S. academic community. The need for colleges and universities to strengthen their resident instruction programs on the international society and economy has stimulated an interest in developing the international capacity of their faculty. It has also stimulated an interest in study-abroad programs for their students. Thus, colleges and universities now have an interest in collaborative educational and research programs with institutions in other countries as the means to give their faculty more experience abroad, to generate new knowledge on the rest of the world, and to sustain and strengthen the knowledge base of their faculty.

A second large interest group arises from the international dimensions of important environmental problems such as acid rain, the disappearance of parts of the ozone layer in the upper atmosphere, and the growing concerns about global warming that have generated domestic political movements likely to persist well into the future. These groups can be mobilized in support of international development assistance if the Agency for International Development develops programs that more directly address their interests and concerns.

Private Voluntary Organizations are another rapidly growing political force in the United States. These organizations have a special interest in linking up with counterparts in developing countries to address problems of poverty, health, women and child welfare, and the environment. By helping to strengthen these organizations and supporting their programs abroad, this important base of political support for foreign economic assistance can be mobilized.

Some private firms are also becoming more interested in international development programs. Increasingly, they recognize that their future markets lie in the developing countries but that these markets are dependent on economic growth in those countries. Similarly, they realize that an ever larger share of their raw materials will come from these countries.

Finally, there are those concerned with sustainable economic development, in part associated with environmental concerns. However, sustainable development has taken on a life of its own as a development issue, driven in part by growing concerns about the persistence of rapid population growth in the developing countries. Proponents of sustainable development can also be the basis of political support for economic cooperation programs for years into the future if the Agency will provide the leadership.

Revitalizing Program Priorities

The program emphases of the Agency for International Development and its predecessor agencies have changed significantly over the years. Some of the changes have reflected passing fads in the international development community; others have reflected changing perceptions of what is needed in particular circumstances; and still others have reflected a winnowing from past experience of what will and will not work.

A new development agenda is emerging on the international scene. Some of the items on the agenda reflect growing recognition of important new development issues. Others reflect a growing recognition of the basics of what is needed to promote economic development. There is a growing consensus in the development community of the ingredients needed for successful economic development.

Renewed Attention to Agricultural Development

Task Force Recommendation:

Agricultural development be returned to a top place on the development agenda, not only in the Agency for International Development but in the multilateral development agencies as well. It should also continue to receive high priority from governments in the developing countries.

It was noted earlier in this report that both bilateral and multilateral development agencies are deemphasizing agricultural development in their portfolios. The share of development assistance devoted to agriculture by the Agency for International Development declined from well over 50 percent at the beginning of the 1980s to only slightly over 30 percent at the beginning of the 1990s.

The Task Force believes this to be a serious mistake and urges in the strongest possible way that more attention be given to basic agricultural development in the years ahead.

There are two reasons for this recommendation. The first is that, contrary to a rather widespread belief, the world food problem is far from resolved. Significant contributions to increased food supplies made by the widespread adoption of the miracle wheats and rices are on the decline. So far there is nothing in the pipeline that promises to replace them on anything like the scale needed. The expectation is that in the not-too-distant future the world may well be facing another food crisis. This crisis will be exacerbated if the developing countries experience revitalized economic growth on the scale the Task Force expects in the decade ahead.

A world food crisis will have three important consequences:

First, the progress being made in reducing the share of the world's population that is malnourished will be stymied.

Second, a rise in food prices can constrain economic development in those same developing countries that have the most potential for economic growth and for contributing to improvements in global welfare.

Third, developed countries such as the United States will also bear the consequences of a global rise in food prices. Although a rise in food prices will not have as significant an effect on real incomes in the United States as it does in the developing countries, it is still the equivalent of a tax that will lower economic growth and will have a larger proportional effect on the poor and other disadvantaged groups in this country than on upper-income groups.

The second case for renewing attention to agricultural development rests on the significant contribution it makes to economic development. The significance of agriculture as the basis for economic development rests on the fact that everybody consumes food and not on the size of the agricultural labor force or the share it makes up of the total labor force. Reductions in real food prices as a consequence of the modernization of agriculture distributes the benefits of economic development widely in society, and in favor of low-income groups. In this sense it induces secondary development by providing a broad-based market for nonfood goods and services. In addition, since food is a wage good, reductions in the real price of food make it possible to increase real wages without increasing nominal wages. This helps make domestic industry more competitive in the international economy, promoting international trade and raising employment more generally.

Task Force Recommendation:

Efforts to develop the capacity to generate new production technology should receive significantly higher priority in the agricultural programs of the Agency for International Development.

The key to sustained agricultural development in the developing countries is to build the capacity for agricultural research that can assure a sustained supply of new production technology. Increases in productivity are increasingly difficult to obtain as successes are realized. Moreover, an ever larger share of research expenditure has to go for maintenance research just to sustain the gains of the past. This suggests that technological development should receive higher priority as development proceeds. Unfortunately, it is precisely this component of the Agency's agricultural development assistance that has been declining in recent years.

Addressing the Population Problem

Task Force Recommendation:

The United States, through the Agency for International Development, recommit itself to providing assistance for family planning efforts, and that it do this in a way to provide available family planning technology to the poor and disadvantaged in the developing countries.

Population continues to grow at a rapid rate in many, if not most, developing countries, although there has been a tendency for these growth rates to decline slightly over the past decade. These continued high growth rates have a number of important implications.

First, they come on top of an ever larger population base, with the result that the absolute increase in numbers is large even though the growth rates themselves may be trending downward. This is especially important in countries such as India and China where population numbers are already large in absolute terms. For the world as a whole, present estimates are that we will have approximately one billion more people by the end of this century.

Second, population growth rates tend to be inversely related to the level of per capita income. This means that the resources available for investment purposes are limited when expressed in per capita terms at low levels of income. A vicious circle, or a low-level equilibrium trap, is created that is difficult to break out of without an external infusion of resources.

The third implication, and one that exacerbates the preceding problem, is that high population growth rates lead to high dependency ratios. A relatively high share (65 percent to 80 percent) of the total population is less than 18 years of age when population growth rates are high. Under such circumstances, educating the young people imposes an enormous demand on human resources. For most countries, it is almost impossible to provide adequate levels of schooling until population growth rates decline. In fact, the combination of this and the low-level equilibrium trap just discussed, impose important constraints to economic development in country after country.

The fourth major implication of high population growth rates is the threat they pose to the environment, not so much globally perhaps but certainly in the poorer countries. Economic growth is increasingly based on investments in human capital, not so much on natural resources. Moreover, the prices of raw materials are tending to trend downward over time, not upward as they would if the world were facing a situation of natural resource scarcity relative to demand.

The issue arises in the individual instance, however, not in the global sense. If an individual country fails to invest in productivity-enhancing new technologies, pursues policies for the development of its manufacturing sector that are anti-employment in nature, and at the same time pursues economic policies that cause agriculture to expand on the extensive margin rather than on the intensive margin, then population pressures may force rural populations to expand onto marginal lands and up hillsides, causing serious environmental degradation.

Population policies have become controversial in a number of countries, and for a variety of reasons. In some cases such policies have been implemented by authoritarian or totalitarian regimes, with serious infringement of civil and human rights. In other cases, they have implied pro-abortion policies that are not acceptable to large segments of the population, both in this country and abroad.

These issues can be avoided, with a reasonable population policy still possible, by making available to low-income groups the same family planning technology that is available to upper-income groups. The individual family still can exercise its own choice about the number of children it has.

As per capita incomes rise, families tend to demand fewer children but to invest more in them in the form of higher levels of education, and improved health and nutrition. In a sense these investments improve the quality of the children while reducing the number. The total amount of child services may increase; in fact, the evidence is that the income elasticity of demand for child services is positive.

Promoting economic development may thus be the soundest policy over the longer term to bring population into balance with the natural resource base on a global scale. Such efforts are an important complement to programs that more directly focus on building human capital.

Building Human Capital

It has been emphasized in earlier chapters that the critical issue in promoting economic development is not so much the amount of capital accumulated relative to the stock of population as it is the quality of that capital. The current consensus among development economists is that investments in human capital are the critical, high-payoff means to economic growth in most countries.

Human capital, as noted in chapter 6, includes the nutritional status of the population; its health status; the level of educational attainment; the level of skills acquired by on-the-job training and vocational training; the institutional arrangements; and the culture of the society—the extent to which the values and beliefs of the society lend themselves to modern economic development.

In this section we address the first four of these issues; institutional development is discussed in a later section. A society's culture is not viewed as subject to change in the short run, nor is it appropriate for a program of international collaboration designed primarily to be in the best interests of both the United States and the collaborating country.

Task Force recommendation:

The United States join with other developed and developing countries in an effort to assure an adequately nourished global population.

The goal of an adequately nourished global population is attainable, not overnight but within a reasonable time frame. While attainable, the goal is not innocuous. Eliminating malnutrition involves eliminating poverty. Thus, while feeding programs for the disadvantaged may be needed in the short term, the longer term problem will be solved only as economic development is broadly shared within individual countries and on a global scale.

Task Force Recommendation:

The United States sustain its commitments to international organizations that deal with global health issues; and that it do more to facilitate the collaboration of U.S. health organizations with those in other countries so as to improve this nation's knowledge base on diseases that pose a threat to the world's stock of human capital, including its own. Special attention should be given to the health status of the rural sectors in the developing countries.

Improving the health status of the population is another high-payoff investment. Improved health status raises physical productivity, increases mental alertness, and facilitates the absorption of cognitive skills. In addition, it reduces time lost from work, and helps sustain the underlying population base.

The delivery systems for health services are notoriously weak in the rural areas of these countries relative to those in urban areas. If development is to be broad-based and agriculture is to be modernized, the availability of health services in rural areas should be comparable to those in urban areas.

Task Force Recommendation:

The United States give high priority to encouraging greater investments in education and training in the developing countries.

Investments in training, in formal schooling, and in higher level education are additional critically important forms of human capital. The importance of these components

of education and training has been repeatedly stressed by the Task Force, as has been the tendency of governments to under-invest in educational attainment among the rural population relative to the urban population.

Such investments are critical to promoting higher economic growth rates, and to assuring a more equitable distribution of the benefits of economic development.

Task Force Recommendation:

The United States give high priority to increasing the stock of knowledge generally, but especially to increasing the stock of knowledge that is in its own interest.

The stock of knowledge itself is another important form of human capital. Knowledge is the essential ingredient for producing improved technology, for understanding other cultures and other peoples, and for developing sound strategies for dealing with and competing economically with other countries. Some kinds of knowledge are highly transferable, such as the basic principles of physics and chemistry, while other kinds are highly location-specific.

In collaborating with other countries to invest in the development of new knowledge, the United States should concentrate on knowledge that is location-specific, and of direct benefit to this country.

Improved Equity and Broader Access

Task Force Recommendation:

The United States give high priority in its international collaboration efforts to improve the economic opportunities of population groups that suffer from economic and political discrimination.

Certain population groups suffer economic and political discrimination in almost all countries. Among these are women, children, and disadvantaged ethnic groups such as tribal and minority groups.

The Task Force believes that the proper way to approach this problem is not through programs that directly redistribute income or assets. Rather, ways should be pursued that make the economic pie larger for these groups and thus for society as a whole, and at the same time open to these groups the services available to other members of society.

The Task Force believes that the equity-versus-efficiency dichotomy is false. An improved distribution of income can be obtained with proper economic and investment policies, while at the same time promoting economic development. The key is to focus development programs such as improved nutrition, improved health, and expanded educational and training opportunities on the disadvantaged. In addition, it is essential to assure that the civil and human rights of these groups be assured so they have access to the same public services as those available to mainstream citizens in these societies.

The Environment and Sustainable Development

Task Force Recommendation:

Priority should be given to collaborating with the developing countries, the countries of Eastern Europe, and the republics of the former Soviet Union in addressing environmental problems. High priority should be given to collaborating on problems involved in acid rain, the release of chlorofluorocarbons, and the accumulation of greenhouse gases that potentially can lead to global warming—international issues that low-income countries may be unable to address given their limited stock of human capital and financial resources.

Environmental problems have been neglected in many parts of the world, but especially in the developing countries and those of Eastern Europe and the republics of the former Soviet Union. Similarly, the issue of whether development processes can be sustained over time has not received the attention it deserves, either in this country or abroad.

Addressing environmental problems can be an important means of promoting economic development both in the short and long term. Economic development need not be sacrificed, and in fact dealing with environmental problems may provide a stronger basis for such development over the longer term. There is growing evidence, for example, that viable economic development can occur in the tropical rain forests without destroying the tree cover. Similarly, soil conservation reduces the costly accumulation of silts in lakes, streams, and rivers that imposes constraints on economic development. The accumulation of fertilizers and pesticides in water supplies involves similar effects and can deter development. Addressing these problems thus promotes economic development rather than restrains it.

Institutional Development

Task Force Recommendation:

Present efforts to help the developing countries and those of Eastern Europe shift to market forms of economic organization be sustained and strengthened, and expanded to include the republics of the former Soviet Union.

The development of viable institutional arrangements may be the highest payoff investment the United States can make in collaborating with developing countries to promote their economic development. These arrangements are also in many, if not most, cases in the best interests of the United States.

New institutional arrangements now needed in many countries are an important example is those needed for increased dependence on markets for the organization of economic activities. There is growing recognition of the improved economic performance associated with market economies, both in the developing countries and in the countries with previously centrally-planned economies. There is much less knowledge of just how to go about shifting from a centrally planned economy to one that depends on market forces, especially in terms of addressing the political problems that are likely to arise.

Greater dependence on markets not only improves economic performance, it breaks up and decentralizes political power, and makes democratic forms of governance more feasible.

Shifting to a greater dependence on market forces does not mean that institutional arrangements in the public and nonprofit sector should be ignored. To the contrary, viable education, training, and formal schooling arrangements are also needed if society is to invest in human capital at socially optimal rates. Vital institutions for delivering health care services are also needed, as is the public sector capacity for research and development.

Task Force Recommendation:

High priority be given to collaborating with developing countries in building the institutional arrangements needed to bring about investments in human capital at socially optimal levels.

U.S. development efforts at one time gave a great deal of attention to developing new institutional arrangements in the developing countries. Development assistance efforts eventually turned away from such initiatives, however, in part because they are very difficult to do, and in part because they require sustained commitments over time.

These efforts are needed and should span the full panoply of institutions for feeding programs, improved nutrition, improved delivery of health services, education at all levels from primary to higher education, and especially graduate training, and the institutions for research and technological development. Collaboration to these ends can in many cases be the means by which U.S. institutions of higher education and other private and public-sector

research institutions can develop their own knowledge base on the rest of the world, and by which they can do research on other parts of the world. An important criterion in deciding which institutions to collaborate with in other countries should be the complementarity to U.S. interests.

Task Force Recommendation:

High priority be given to helping the developing countries develop policy research capacity.

Another form of institutional arrangement needed in most developing countries is the capacity for policy research and analysis. The development of sound economic policy requires knowledge on both the domestic and international economies. If developing countries can develop sound institutional arrangements for this purpose, they not only would be able to take charge of their own economic policies, they would also be better able to negotiate with international development agencies.

An important issue here is that the Agency for International Development cannot be expected to have the in-house expertise and knowledge to devise sound development policies and strategies for every developing country. Moreover, helping to develop the policy research capability in the developing countries often helps them gain the political and economic independence they so badly seek. They are less dependent on outside advice and can make better policy choices.

Task Force Recommendation:

Present programs to promote and strengthen democratic forms of government be sustained and strengthened.

Finally, there is the issue of developing viable institutions for democratic governance. An important feature of shifting away from central planning and toward market forms of economic organization has been the parallel shift away from authoritarian and totalitarian forms of governance toward democratic forms of governance. The United States has a great potential for collaborating in the development of these new forms of governance.

Linkages

Task Force Recommendation:

Private voluntary, nongovernmental, and private sector organizations, and the higher education community be increasingly linked together in future programs.

Past U.S. international development efforts have, more than in almost any other developed country, depended on the university system to deliver an important share of development assistance. U.S. colleges and universities are this nation's comparative advantage in delivering development assistance, and this advantage is rooted in its land grant universities with their strong sense of mission.

More recently, the PVOs and NGOs have increasingly been brought into development programs. The private sector, aside from consulting firms, has for the most part been largely left out.

One of the things that makes the land-grant universities so successful in domestic economic development is the very effective informal working relationships they develop with the private sector. The same can be done in international development efforts.

An important innovation would be to link both the U.S. private sector and U.S. universities with members of the PVOs or NGOs for more broadly based collaborative efforts. Such grass roots approaches should be especially effective in programs that attempt to improve the lot of the poor and disadvantaged. They should also be helpful in addressing certain classes of environmental problems. They can even be helpful in institutional development activities involving higher-level educational institutions through the establishment of strong, effective working relationships with potential constituencies.

The Task Force believes it important to establish linkages between PVOs and NGOs in this country with similar organizations in the developing countries, and to establish similar linkages between private companies in this country with those in the developing countries. The Task Force also believes that a certain amount of development assistance should go for the strengthening of the PVOs and the NGOs themselves.

The development of these institutional linkages will take time and a great deal of careful effort. However, the Task Force believes that the establishment and development of such linkages is key to self-sustaining development efforts and the development of political support for development policies both in the United States and in the developing countries.

Concluding Comments

There is growing recognition in the development community of the importance of revitalizing the private sector as an essential part of a vigorous and robust development process. Unfortunately, this seems to imply for some participants in the debate the need for direct subsidies to private firms.

The Task Force believes such subsidies are counter-productive over the longer term. Instead, it should be recognized that making appropriate public sector investments and developing sound public-sector institutions are important indirect subsidies to the private

sector consistent with an efficient use of resources overall. Direct subsidies are not needed and can in fact be counter-productive.

Finally, the Task Force wishes to emphasize that, with a few exceptions, its priorities for development assistance diverge significantly from present program priorities in the Agency for International Development. We believe the Agency needs to re-think its priorities since as presently cast they are not likely to contribute to higher rates of economic growth in any meaningful sense.

Making More Effective Use of Food Aid

Food aid is a political reality. It is a logical consequence of domestic commodity programs that set domestic prices for the commodities above their market clearing levels and thus lead to surplus production. Moreover, the programs are not likely to go away in the near future. The challenge is to make more effective use of these resources.

In the early years of the U.S. food aid programs, large proportions of the food were sold into the domestic markets of the recipient country and the proceeds used for other development activities or to support the budget of the recipient country. Academic critics of such programs noted that such policies had strong disincentive effects to local producers (by increasing domestic supply and thereby depressing prices), and were counter-productive of efforts to strengthen agriculture, which was often a goal of U.S. policy in those very same countries.

A number of measures were taken to alleviate this problem, including the more direct use of food aid for agricultural development purposes. More recently the concept of "monetization" has emerged to describe the act of dumping the supplies into the domestic economy, and that concept has taken on the aura of a "good" thing. Monetization is viewed as a desirable policy because it generates local resources to provide budget support and the means to undertake local development projects. This implies to some that there are two resource effects: the initial increased supply of food and the fiscal resources which its sale into the economy generates.

This approach is just as misguided as it was prior to the adoption of the concept of monetization. Selling the commodities into the market has disincentive effects for local producers, and in fragile economies these disincentive effects can be large. Moreover, there is only one resource transfer, and that is the original injection of food. The local fiscal resources the sale of food generates are actually the consequence of an implicit tax on the agricultural sector and is often paid by those least able to pay it. The solution to the fiscal resource problem is to develop a sounder fiscal system, not to perpetuate and exacerbate existing problems.

The 1990 Farm Bill amended the food aid authorizing legislation (PL 480), taking effect January 1, 1991 and extending through December 31, 1995. The new law places greater emphasis on using food aid to promote food security and the privatization of agricultural market systems. The law is structured so that a greater percentage of the total U.S. government food aid programs will heretofore be provided on grant (as opposed to loan) terms.

An important administrative change in the program provides for the Title I loan program (concessional sales for trade and development assistance) to be implemented by USDA, while Title II (emergency and private assistance programs) and Title III (food for development) are to be administered by A.I.D. Provision is made in the law for debt forgiveness; for the extension of eligibility of certain elements of the program to middle-income countries and emerging democracies; and for the payment in cash to support the programs of eligible PVOs.

This new legislation provides support for a number of the Task Force's recommendations. However, it also has some provisions the Task Force believes may not be consistent with sound development policy. For example, the legislation provides ample incentives for sale of the commodities into the open market, which will have disincentive effects for local producers. In addition, it prohibits any use of local currencies to finance the production for export of agricultural commodities that would compete in the world market with similar commodities produced in the United States if such competition would cause substantial injury to U.S. producers. Such restrictions may distort the allocation of development funds toward lower-payoff projects.

The Task Force focused on one possible use of food aid and urges that it be given high priority in the use of these resources.

Task Force Recommendation:

Food aid be used as a means of inducing more children in developing countries to go to school.

The way to minimize the disincentive effects of food aid is to provide it as a direct income-transfer in real terms to low-income families. In that way the income-transfer increases the demand for food at the same time the domestic supply is increased. Price-depressing effects should be minimal under these circumstances.

However, food aid transferred in this way can also be used as a means of inducing higher participation rates in schooling among low-income families.

Consider the case of school attendance among very poor families. The first- and second-born in such families in the developing countries are often not able to go to school

because they are needed in the family either to help produce the subsistence food supply or to earn a subsistence income by selling minor items on the street or by simply begging. Children who come later in the life cycle are able to go to school, but at least two cohorts of children often are lost from the educational process.

This is where food aid can make a contribution if it is used in the right way. A possible approach is to provide a quantity of food equivalent to what is needed to offset the income the child is earning. This food aid should be provided conditional on the student being in school for a requisite period. In effect, what is done is to pay the child to go to school. This typically will involve a larger amount of food for the individual family than is involved in school lunch programs.

Such an approach has a multiple payoff in terms of attaining economic development goals. It improves the nutritional status of the affected families, and in this way raises the health status of the families as well. Improving their nutrition and health status increases the ability of the children to learn, and especially to absorb cognitive skills. This is a multiple payoff, on top of the original goal of getting more students into school.

Task Force Recommendation:

The policy of monetization be phased out as quickly as possible and that viable fiscal systems be developed to generate the resources needed to support local programs for such activities as collaborative educational, research, and other kinds of programs.

Another high payoff use of food aid would involve using the counterpart funds generated by the sale of such aid to provide local support for collaborative educational, research, and other kinds of programs. Such activities have a high social payoff in their own right. So long as food aid continues to be monetized, the counterpart funds so generated can be an important contributor to obtaining a higher rate of economic growth if used to support such activities.

**Strengthening the Agency for International
Development**

**A Center for Scientific and Technological Cooperation in
Development**

Task Force Recommendation:

**A new Center (or Institute) for Scientific and Technological Cooperation in
Development be established to promote scientific and technological**

collaboration between U.S. educational and research institutions and similar institutions in other countries.

A strong element of U.S. foreign economic assistance almost since its inception has been the sharing of this nation's knowledge with those in the developing countries. This was the explicit point of President Truman's Point IV Program. It has also been an important part of later institutional forms of this country's international assistance programs.

An important assumption behind these programs was a belief, supported by substantial evidence, that the United States was the scientific and technological leader of the world, and that knowledge was a nonexhaustible resource that could be shared with others. Another belief, often expressed explicitly, was that the land grant colleges and universities held a privileged position in the U.S. system and thus should play a major, if not monopolistic, role in delivering technical assistance to other countries.

These assumptions are no longer tenable; neither are many of the other assumptions that underlie our economic assistance programs. For example, the United States is no longer the predominant leader in expenditures on science and technology; an ever larger share of the world's research and development budget is spent by other countries.

Similarly, the United States has lost its global leadership in field after field of science and technology. These developments mean that the United States can no longer view itself as being the source of all knowledge, but should instead position itself to benefit from the new knowledge being produced in other countries. It can do that by developing programs that foster international cooperation, with mutual sharing of knowledge, rather than to view its main mission as one of technical assistance.

From a somewhat different perspective, the United States needs to accumulate a broader and enhanced stock of knowledge on the rest of the world. Developing cooperative research programs is an important way to do that. Similarly, U.S. young people need to be trained and educated to work in an increasingly interdependent world. They need to know more about other parts of the world and other cultures. U.S. faculty thus need to have a stronger base of knowledge on other cultures, other economies, and other political systems.

The Foreign Assistance Act was passed in 1961 to develop programs that would attain some of the above objectives. Unfortunately, this legislation tended to view the rest of the world from the old perspective of U.S. dominance.

The proposed Center should be the recipient of a significant share of this nation's appropriation for international economic assistance. Some part of the grants would be for collaborative research efforts. Another part would be for collaborative educational programs, to include faculty exchange, student exchange, and the development of truly international educational endeavors.

The Center would be a grant-making institution comparable to the National Institutes of Health (NIH) and eventually have the same prestige attached to it. Grants administered by the Center would be made on a competitive basis and would be open to all U.S. universities. Proposals would be subject to peer review in the same way that proposals are made to the NIH and the National Science Foundation.

What would differentiate the projects of this new Center is that they would be truly collaborative efforts. Research, educational, and institutional development projects would have to have partners in another country or countries. In addition, funding would have to be on a collaborative basis. Past international research and education programs have tended to displace domestic sources of funding in the recipient country. Consequently, researchers and educators in other countries have not developed their entrepreneurial and fund-raising skills, and domestic sources of support have not emerged in other countries.

Making the grants conditional on financial support from domestic sources in the collaborating countries should encourage significant institutional development in those countries.

The same applies to participating U.S. institutions. Since these programs would ultimately be in their own economic interest, they also should provide a predetermined share of the resources for the programs. Requiring counterpart funds on both sides of the cooperative arrangement has the potential to mobilize a significant amount of additional resources. Moreover, it makes it likely that the cooperative programs would be more effectively integrated with ongoing programs in cooperating institutions.

The Center would need a strong in-house technical capability. This in-house staff would need to work closely with the regional bureaus of the Agency for International Development to identify program priorities and to help facilitate program development. The in-house staff could also serve as the strategic analytical capacity for the Agency as it develops its own programs. In this sense it would be a strong asset to the Agency.

There are a number of reasons for establishing a center and program of this kind.

First, in recognition of the growing extent to which the United States faces competitive pressures from abroad, many universities in this country are attempting to internationalize their curricula and to do more research on international issues. However, funding for such efforts has been sorely lacking, even in the major research universities. To date, the Federal government has not made a significant commitment to international research or education within U.S. research and teaching institutions. The International Education Act of 1967 was dedicated to that end. Although passed by Congress and signed into law by the President, money has never been appropriated for it.

Second, one of the problems with strengthening the international curricula in the universities is the lack of faculty with true international competence. An expanded program

through the proposed Center would enable the United States to take important steps towards the development of such faculty competence.

Third, the proposed program of the Center would be of considerable value to the collaborating countries. It would enable scientists and educators in those countries to collaborate with some of the best researchers and collaborators in this country. This collaboration would be on the basis of mutual respect, however, and would benefit both sides. Moreover, if the projects and programs are well conceived, there can be a great deal of institutional development on both sides.

Another advantage of such an initiative is that it would enable the United States to capitalize on the past investments it has made in participant training as a component of institutional development. In addition, this is an effective way of dealing with the so-called problem of "graduation from aid." Because it is collaboration, not aid, no country "graduates." The nature of the relationship simply changes over time. Collaborative programs would become more sophisticated and different programs would evolve as development proceeded.

The knowledge and human capacity growing out of such international collaboration should be of value to both the private and public sectors in this country. It should give the nation a capacity to access the results of research and development activities undertaken in other countries. It should also enable the United States to compete more effectively in the international community, drawing efficiently on knowledge and technology produced in other countries.

The key to the success of the Center would be the acquisition of high-quality staff to manage and direct the program. To be effective, the Center also needs to have a sense of priority and a well-articulated mission and set of objectives. An advisory council of highly qualified development specialists should be created to provide policy guidance for the Center and to help establish program priorities, and keep them focused over time.

To develop the effectiveness of the program further, U.S. universities need to provide for collaborative arrangements on the domestic side. Not every university needs a research and educational capacity for every country in the world. There is a role for country, regional, and subject-matter specialization. An end product of an expanded international research and educational capacity in this country could well be new institutional arrangements that facilitate cooperation.

Identifying the most appropriate institutional home for the Center was a major challenge for the Task Force. The principal alternatives considered were:

- * Establish the Center as a completely new, autonomous institution;
- * Expand and strengthen the newly created A.I.D. University Center in AID; or

* Establish the Center in the National Academy of Sciences/National Research Council.

The Task Force has concluded that in the long run this nation would best be served by establishing a completely autonomous and independent center to which foundations and government agencies would contribute resources. Such an autonomous center would have the flexibility to design and manage an international collaborative program and be able to attract the highest quality staff.

The establishment of such a center would require the leadership and support of the major foundations in this country and of the university community. Such leadership and support to strengthen U.S. international collaborative efforts in science and technology are needed in any case to regain the international leadership this nation is rapidly losing.

Until such a center is created, the Task Force recommends that efforts be made to strengthen the new University Center recently established in A.I.D. As many as possible of the characteristics and features of the proposed Center for Scientific and Technological Cooperation should be incorporated into the University Center. This capacity can then be transferred to the proposed Center and give it a running start.

The current CRSPs, which have rapidly become an important means by which the U.S. agricultural research and education establishment collaborates with similar establishments in the developing countries, could serve as the basis for the new Center. Eventually, the Center should be the basis of scientific and technological collaboration between the United States and institutions in all countries, as well as with international institutions such as the International Agricultural Research Centers.

An Institute for Private Voluntary Cooperation

Task Force Recommendation:

An Institute for Private Voluntary Cooperation be created, paralleling the Center for Scientific and Technological Cooperation in Development, to strengthen and collaborate with grass roots organizations in developing countries.

Humanitarian concerns for the poor in the poorest countries and for those who have been displaced by international conflict and domestic repression will continue to represent a basic impulse for foreign assistance by a wide spectrum of the American public. Official assistance agencies do not have a strong record of performance in this area

The Institute should be organized to fund programs by PVOs, NGOs, cooperatives, and other agencies on a competitive basis. The Task Force believes that too much of present funding for such activities has been treated as an entitlement.

The Institute could also play a major role in addressing the problems of disadvantaged women, children, and marginalized minority groups. Much of food aid could be channeled through this Institute, including that designated in support of educational programs such as those described earlier in this chapter.

An important part of the resources allocated to the Institute should be used to strengthen PVOs and NGOs in the developing countries and here at home to undertake the programs assigned to them. The in-house staff should have a high level of technical competence to evaluate proposals and identify the kind of strengthening programs needed by the PVOs and NGOs. The PVOs and the NGOs should also be linked with universities both in the United States and in the developing countries.

Strengthening the Technical Capacity of the Agency

Task Force Recommendation:

A major effort be made to build and maintain a highly qualified staff that is technically competent to address the challenges of the revitalized mission of the Agency.

At one time the predecessor agencies of A.I.D., and even A.I.D. itself, had a significant in-house staff of highly qualified technical people. That capability has gradually eroded over time. Today, most of the staff are highly qualified financial people, competent generalists, or people with a high degree of entrepreneurial capability.

Knowledgeable development economists and sociologists, political scientists who provide leadership for programs designed to deal with governance issues, specialists knowledgeable about the scientific and technological issues of agriculture, and those knowledgeable in a similar way about the other sectors of the economy are needed. *The Agency should also have in-house capability on international trade issues to assist in devising strategies to realize the complementarity between aid and trade.*

Internationalizing U.S. Universities

Task Force Recommendation:

U.S. universities internalize their international programs and make them an integral part of the rest of their activities. Mechanisms should be

developed to encourage active collaboration on research, extension and outreach efforts, university programs, and other activities.

Many U.S. universities need significant reform if they are to participate effectively in international cooperative activities as envisaged in this report.⁴¹ In fact, a great deal of institutional innovation and creativity is needed generally if the United States is to develop sound collaborative programs with institutions in other countries.

Consider U.S. universities as an example. Although perspectives and programs are changing, many U.S. universities are still very much domestically oriented. Moreover, such participation in international activities as they do engage in is done in part on the basis of services-for-hire or contract. They thus seek full reimbursement for their program involvement.

The result is that their international programs are often little more than appendages to programs that are inherently domestically oriented.

International programs should no longer exist as separate and independent activities. Moreover, the incentive and reward systems within the universities should encourage the involvement of the best of the faculty in such programs. In some cases, significant sums will be needed to develop the international skills of the faculty. In many, if not most, U.S. universities, significant reorganizations and investments will be required if they are to develop effective international programs.

U.S. universities will also need to develop more effective ways of sharing their talent and students if the nation as a whole is to develop a strong knowledge base on the rest of the world. Certain universities will have a comparative advantage on certain countries and regions, often related to their own economic base in their city or state. The activities that comprise this comparative advantage should be strengthened. Students will be selective of such institutions according to their own interest. But in the case of the land grant universities, in which tuition is subsidized, mechanisms will need to be worked out whereby students from one state can matriculate in the university of another state to pursue their interests while paying the same tuition they would pay in their home state.

Mechanisms also need to be developed by means of which universities can collaborate more effectively on research projects of mutual interest. Such mechanisms are evolving in the current system of agricultural CRSPs. They need to be developed on a more extensive and systematic base.

⁴¹ For more detail on these issues, see James B. Henson and Jan C. Noel, "University Role and Participation in U.S. Development Cooperation and Assistance," paper commissioned for the Task Force. 1990.

Similar mechanisms are needed for extension or outreach programs. Such programs need to be able to draw on expertise in other universities since it is most unlikely that any one university will have faculty capability on more than a limited range of countries. Perhaps formal faculty exchange arrangements can be developed for such purposes.

Mechanisms for collaboration between the universities and the other kinds of participants in the programs are also needed. An important feature of U.S. land grant universities is that they have developed strong domestic collaborative arrangements with the private sector and with NGOs. Similar kinds of arrangements and linkages are needed for their international programs.

Strengthening The U. S. Department of Agriculture and Other Government Agencies

Task Force Recommendation:

Given the U.S. Department of Agriculture's strong capabilities and the current leadership's interest in international cooperation and development, the role of USDA in international cooperation, and in international science and education, be broadened and funded on a more consistent basis; more funds be appropriated and/or redirected for USDA collaboration in the agricultural sciences.

The Task Force believes that the rationale in this report should help convince law makers and policy makers to implement the above recommendation.

The U. S. Department of Agriculture has much to contribute to international development and cooperation, and much to gain as well. Agricultural development is the key to getting the economies of developing countries moving, and as the Task Force contends, USDA has the expertise and experience to contribute significantly to that development process. At the same time, participating in collaborative efforts to get agriculture moving in developing countries can better serve U. S. agriculture. Solving domestic agricultural problems increasingly calls for knowledge, germ plasm, and technology that can only be acquired from participation in the global network of agricultural research and extension.

Historically, USDA has played an important, although uneven, role in international development assistance and cooperation. Its primary interest has been to help U. S. agriculture become more competitive in world markets. It has thus an interest in world economic growth and improving the economies of developing countries, with the expectation of increasing future markets for U.S. agricultural products.

The USDA has often found its support for international development under fire from traditional commodity groups that view such activities as giving aid to their competitors in world export markets. As a result, international economic development activities in the Department have been entirely funded by A.I.D. These low-profile activities have sometimes been discouraged by USDA officials.

However, international activities of a collaborative nature have generally been embraced by domestic agricultural interests, and the USDA has carried on a continuous program of technical cooperation independent of A.I.D.'s programs. Prior to the Foreign Assistance Act of 1961, USDA had responsibility for programs of economic and technical cooperation related to agriculture and natural resources, with overall coordination by the Department of State. With the formation of A.I.D., the USDA lost claim to those programs whose primary beneficiaries were developing countries. Since that time, USDA has provided technical assistance and training for A.I.D. over a wide range of subject matter (including agriculture, forestry and nutrition), on a reimbursable basis. However, the ambiguity surrounding this division of labor has been a continuing source of coordination problems.

When Title XII was under consideration in the mid-1970s, some supporters wanted the legislation to give USDA jurisdiction over the scientific and technological programs, partly because the universities were comfortable in working with the Department. However, Earl Butz, then Secretary of Agriculture, opposed giving USDA such responsibility because he felt it would cause political problems with farm groups. Although A.I.D. was eventually assigned the responsibility, the BIFAD (created by Title XII) worked closely with USDA, appointing an official to serve as "Federal Designee" for the Board.

The passage of the 1990 Farm Bill gave USDA an expanded set of global agricultural science, education and development priorities, which it must address aside from A.I.D.-financed programs. In general, A.I.D. countries tend to be those that are lesser developed, while USDA's interests tend to be in the more developed countries. Thus the need for coordination most often occurs where USDA's global interests overlap with A.I.D.'s responsibilities.

Although the USDA has ample authority to carry out international collaboration in the agricultural sciences, few funds have been appropriated for that specific purpose. Until the Congress sees the domestic benefits of these activities, lack of funds will probably limit USDA participation in international collaboration--activities the Task Force has argued have a high payoff for the United States.

The current leadership in USDA is committed to expanding participation in international cooperation and collaboration. Earlier in the Bush Administration, a National Policy on International Science, Education, and Development was adopted, which emphasized the importance of agriculture as a means to revitalize and expand the economies of many countries and placed high priority on science and education. The policy

underscored the importance of U.S. participation to help speed the process of development as well as to strengthen U.S. agriculture.

Interest in international cooperation and development among USDA agencies is uneven and in such a large and diverse department, coordination of programs is difficult. Thus, it is not surprising that the Department does not always speak with one voice on international cooperation and development. In a special paper commissioned by the Task Force, Holdcroft and Nielson⁴² pointed to the ambiguities in the posture of the various USDA agencies toward international development and suggested a Department-wide coordinator for international programs at the Office of the Secretary level.

Coordination between USDA and A.I.D. has often been a problem and source of conflict, given the overlapping roles and interests of the two agencies. The administration of the food aid program has been a particular problem, with USDA's commercial interests conflicting with A.I.D.'s development interests. The 1990 Farm Bill attempted to clarify responsibility, but it remains to be seen how this will work in practice. On issues of agricultural development, a joint working group serves as a coordinating body and is exploring mutual interests.

In the kind of global economy we now live in, almost all units of the Department should be constructively involved in the activities of A.I.D., and the range of institutions participating in collaborative efforts can be broadened. For example, the Economic Research Service (ERS) has an interest in better understanding economic and agricultural policies in the developing countries, and in improving those policies so as to promote a more rapid rate of economic development. ERS can do this by collaborating with similar agencies in other countries.

The same applies to the Agricultural Research Service (ARS). With an ever larger share of the world's agricultural research budget being spent in other parts of the world, an ever larger share of biological innovations is being produced in other parts of the world. By becoming involved in collaborative efforts in those countries, ARS will be able to help strengthen those efforts while at the same time positioning itself to share in the new knowledge and technology being developed.

The Animal and Plant Health Inspection Service (APHIS) should also be directly engaged with similar agencies in other countries. With international trade growing and with an ever larger movement of people around the world, the potential for the spread of animal and plant diseases and pests becomes ever larger. By collaborating with parallel agencies in other countries, APHIS acquires the basis for understanding these potential pests and how to deal with them before they arrive in this country. In addition, continuous relationships provide a basis for monitoring the spread and development of such pests and plagues.

⁴² Lane E. Holdcroft and James Nielson, "Strengthening the U.S. Government's Capacity in Agriculture Development," 1990.

The Foreign Agricultural Service (FAS) has done an excellent job of protecting the interests of U.S. producers in the narrow sense. However, it needs to broaden its perspective and play an intermediary role in promoting the other activities described above. FAS has an agricultural attache, and in some cases a counselor or a minister, in a large number of countries. These people can serve as important intermediaries for this larger mission. FAS can also play an important role in coordinating the activities of trading agencies established in various states. In this sense, they can serve as a source of market information for these agencies and for similar agencies in other countries.

The Task Force has observed that A.I.D.'s interest in agriculture appears to be declining while the USDA has an increasing interest in the international dimensions of agriculture. This raises questions about the appropriate future division of labor between these two federal agencies.

The Task Force also notes the uneven pattern of interest in international development over the years and recommends that the USDA develop a more clearly articulated policy and rationale for its international involvement, with better coordination among the numerous units of the department.

In addition to the work that USDA has historically done for A.I.D. on a reimbursable basis, USDA could better serve U.S. agriculture by intensifying efforts to internationalize domestic research and education programs through cooperation and collaboration, building on the close historical ties with the land grant universities.

Making More Effective Use of Economic Assistance

Task Force Recommendation:

Remedial actions be taken to improve the effectiveness of economic assistance. (Such actions are spelled out in the sections that follow.)

Adopt New, More Realistic Goals

An important failing of this nation's foreign economic assistance program ever since it shifted from assisting Western Europe to providing development assistance to the developing countries has been its unrealistic goals. Political leaders tend to promise much when they want to mobilize support for a particular program. The U.S. foreign aid program has not escaped this syndrome.

This nation needs to recognize what a small amount of resources is involved in its foreign aid program, even under the best of circumstances, and especially in light of the magnitude of the problem. Any number over \$10 billion sounds like a lot, and most U.S.

citizens expect such a sum to accomplish a great deal in raising per capita incomes in other countries.

However, even under the best of circumstances, this aid seldom amounts to more than one dollar on a per capita basis in the recipient country. When viewed as an investment, the returns would be only pennies in terms of a higher per capita income.

If U.S. political leaders want to develop credible political support for programs of collaboration and cooperation, they need to be realistic and candid about what can be accomplished. A recent study by Willis Peterson shows that the social rate of return to foreign economic assistance by the industrialized countries of the West was on the order of 50 percent.⁴³ That is a high rate of return, and much higher than the rate of return to most commercial ventures. However, when applied to such a small amount of resource transfer, the impact is still rather modest.

Adopt Efficiency Criteria for Allocating U.S. Development Assistance

In the past, political considerations have played a major role in the allocation of this country's scarce development assistance dollars. A major share has gone to two countries, Egypt and Israel. The remainder has been widely allocated among a long list of countries, with little attention given to the expected rate of return in furthering U.S. political and economic goals. The result is that this country has realized far less from its investments in terms of promoting economic development than could have been the case.

As we move away from rationalizing our foreign aid program on the basis of our benevolence, and shift instead to justifying it as something in our own best interests, we as citizens should be able to take a harder line in evaluating foreign aid in terms of realizing our country's goals. Considerable attention will undoubtedly still need to be given to political issues in making program decisions. But a broader perspective on what is in our best interests should be considered. This broader interest should include such things as where we can contribute most to global economic development, where we might realize the greatest contribution to science and technology, where we might realize the largest payoff back into the U.S. economy, and where our activities might have the largest leverage.

In sum, we should be more calculating on the total social rate of return to the U.S. economy, with this criterion given a weight at least equivalent to that given to more narrow political interests. Factoring in such things as contributions to improving the environment and promoting sustainable economic development, and improving the access of women,

⁴³ "Rates of Return on Development Assistance Capital," University of Minnesota. October 1985.

children, and minority groups, will not be easy. But the Agency's planning office should be working on making just such calculations.

Maximize Leverage

Under the best of circumstances, the amount of resources available for economic development assistance will be small in relation to the size of the development task. Consequently, it is important that every effort be made to maximize the leverage of these resources. That means that in addition to assuring that the resources are used for high-payoff investments, every effort should be made to maximize the leverage of the resources on both ends of the development relationship.

Investing in the institutional and physical infrastructure that supports the private sector in the developing countries is one way of doing that. This will raise the productivity of activities in the private sector and help broaden the development process.

Mobilizing the resources in the private and NGO sectors on both sides of the relationship is also important. To the extent both sectors are involved, they will bring additional resources and talents to the endeavor. NGOs, for example, are able to mobilize resources in the United States, and NGOs in the recipient or collaborating countries are able to do the same. Businesses in the U.S. private sector will also bring additional resources to the endeavor if they see the potential for benefits for them in the future.

In the case of the private sector, these potential benefits will loom larger if part of the collaborative effort is directed to improving the policy ambient in the collaborating country. The benefits will also be larger if the collaborative efforts are directed to assuring an institutional framework in the collaborating country that protects private property rights and which assures the private sector that it will be able to take the returns from its investments out of the country. Helping to create this proper institutional framework has a high degree of leverage in its own right, and should have high priority.

Broaden the Domestic Institutional Base

More than any other aid agency, bilateral or multilateral, the Agency for International Development has drawn on the U.S. university system to assist it in its development activities. To a lesser extent, and more recently, it has involved the NGO's. It is now time to broaden this perspective further.

A wide array of other institutions can be used for this purpose. In the case of agricultural development, the U.S. Department of Agriculture has an important role to play. The same applies to other institutions in the government sector. For example, the Environmental Protection Agency should become directly involved in collaborative programs

with parallel agencies in other countries. In so doing, the Agency will not only contribute to efforts in other countries to address environmental and sustainability problems, it will also learn a great deal of value to the United States.

Health organizations in the United States should also collaborate more extensively with parallel agencies in other countries. The rapid spread of AIDS in the United States and other countries should be an object lesson of the potential importance of such collaboration. The United States has every interest in stopping this disease in other countries in order to reduce the risk here at home. In addition, more extensive collaborative arrangements internationally will strengthen the efforts of these institutions to deal with other current and potential health problems here at home. This is an important example in which mutual payoffs are potentially very great.

It is important in developing collaborative arrangements with institutions in other countries to take a linkage or network perspective. The goal should be to link U.S. institutions with similar institutions in a large number of other countries. This can produce a high degree of synergism from the cross-fertilization, and thus generate a large amount of mutual benefits. In a very real sense, this is the key to introducing leverage into the efforts of the Agency.

The missing link in establishing such networks is often the lack of resources to make them happen. The respective agencies would be willing to participate in such activities if they had the travel money to do so. In some cases, they would be willing to commit some of their own resources to the proposed collaborative programs that are in their own interest. Thus, providing transportation costs would have a high degree of leverage, and could mobilize not only a great deal of talent but a great deal of additional operational resources as well.

Avoid Displacement of Local Sources of Support

An unfortunate feature of past U.S. development assistance programs, and of those of other bilateral and multilateral development agencies, has been their tendency to displace local sources of support for development activities and to preclude the development of entrepreneurial skills in the institutions of the recipient country.

The case of a significant cotton research program in Brazil illustrates the problem. In the 1920s, the State of Sao Paulo, Brazil, used its own resources to recruit expatriate cotton breeders from Germany and the United States to establish a cotton research program. It paid their salaries and supported the research program with its own resources. The program was

extremely effective, eventually becoming larger in dollar terms than the total expenditures on hybrid corn research in all of the United States.⁴⁴

But the program came on to hard times, and neither the state of Sao Paulo nor Brazil had the incentive to recreate the program at a later date because foreign aid resources were available from the United States. Ironically, A.I.D. was not able to provide support for a cotton research program out of fear that it would strengthen the competition for U.S. cotton producers.

More generally, foreign aid programs have too often precluded the development of entrepreneurial skills on the part of administrators and other leaders in the developing countries. The provision of economic assistance has displaced domestic sources of support, with the result that local administrators have not had to develop the skills to go to their own funding agencies and make the case for continued support for their programs.

Future collaborative programs should seek to accomplish just the opposite. Resources should be provided only conditional on the collaborating institution having developed domestic sources of support for the programs. This applies to the United States side of the relationship as well. Such a requirement applies an additional test to the importance of the programs. If local agencies are not willing to provide some portion of the support, it says something about the priority given to the specific activity. On the other hand, an agency's willingness to provide for local resources, provides some assurance of the eventual sustainability of the project or program.

Concluding Comments

The international economy, which sets the context in which this nation cooperates with other countries, has changed dramatically since the United States first began its program of collaboration with the developing countries. The role of the United States in that larger economy has also changed, as has the performance of the U.S. economy itself and the quality of its economic policies.

This nation has, if anything, a more vital interest in cooperating with other countries as the 20th century ends than it did at the end of World War II. Although no longer challenged by the Soviet Empire and the cold war, its economic and political interests have grown. The future growth of the U.S. economy and the security of its economic interests will depend in large part on developing closer relations with other countries and cooperating with them for mutual growth and development.

⁴⁴ Harry W. Ayer and G. Edward Schuh. "Social Rates of Return and Other Aspects of Agricultural Research: The Case of Cotton Research in Sao Paulo, Brazil," *AJE*, 54(4): 557-569, Nov 72.

Promoting freer trade is one such form of international cooperation. But helping strengthen the capacity for investments in human capital in other countries, if done in the way the Task Force recommends, can redound in benefits to the United States. Moreover, revitalizing U.S. commitment to agricultural development in the developing countries will help assure that the benefits from economic development are widely distributed in those countries. And further, it will contribute to the formation of human capital in one of the most pervasive ways possible--through improvements in the nutritional status and health of large numbers of the disadvantaged, thus making them more productive.

The key to revitalizing U.S. programs of cooperation with other countries is the creation and development of new institutional arrangements in this country, and the mobilization of its best minds to tackle pressing global problems. The development of relevant and vital institutions in the countries with which the United States collaborates is equally important.

9 Epilogue

As the Task Force study goes to press in early 1992, domestic problems in the United States are becoming increasingly intertwined with reform of foreign aid, making the solution of the former a necessary condition for dealing with the latter. Two current issues are important as an epilogue to the Task Force's report.

The first is the importance of improving the performance of the U.S. economy as the basis for sustaining a program of international cooperation and collaboration with other countries. Key to improving this performance is to balance the federal budget. The recurring deficit in this budget, and the restrictive monetary policy it requires as a counterpart if inflation is to be avoided, have a number of important consequences.

They require the absorption of domestic savings to help finance the deficit and thus reduce the amount of savings available for productivity-enhancing investments needed to keep the United States competitive in the international economy.

They absorb savings from the international economy for the same purpose, and divert savings from potentially more productive investments in other countries, and especially from the developing countries.

Finally, the strength of the dollar, with the combination of a lax fiscal policy and an offsetting restrictive monetary policy, creates pressures in this country for more protectionist measures against the implicitly subsidized imports and the lack of competitiveness abroad that a strong dollar creates.

The United States is currently limited in what it can do abroad because of the recurring deficit in its balance of trade. That deficit is directly attributable to the recurring deficit in the federal budget which given our low rate of domestic savings, requires that we borrow abroad. The inflow of capital is for the most part offset by the trade deficit. The accumulation of international debt which this leads to further limits the ability of the United States to respond to opportunities and challenges from abroad.

Second, with the collapse of the Soviet Empire and the ending of the cold war, it has now become popular to argue for an America First policy. This argument is presumably a plea to abandon the nation's involvement in the international economy, reduce its collaboration with other countries, and withdraw from its commitments to international endeavors.

It would be difficult to find a more unrealistic political slogan.

The United States is part of an international economy, for important economic reasons, not the least of which are technological breakthroughs that have lowered transportation and communication costs, thus expanding the scope for international trade and other international involvements. As a nation we benefit significantly from this international involvement. One need only imagine what we would be paying for our energy supplies if it were not for the ability to import more than half our consumption from abroad, or the quality of automobiles we would be driving if it were not for the competition to domestic firms from foreign companies.

Finally, the sharp dichotomy often drawn between using U.S. resources in the domestic economy or using them abroad is overdrawn. As a part of an interdependent international economy, the strength and performance of the global economy determines in large part how well the U.S. economy performs. Strong economic development in the developing countries can be just as effective as a source of jobs in the domestic economy as direct investments we might make at home.