# Chapter 5 **Issues in Technical Assistance**

## **Issues in Technical Assistance**

Technology development and technology transfer are of course key to American efforts to increase food production in Africa. But the effectiveness of these efforts depends in large part on the effectiveness of technical assistance programs. That leaves a major question: is it possible to determine if assistance—whether through public or private channels—is working?

This section discusses issues relating to the effectiveness of technical assistance, some directed at U.S. Government policies and others at nongovernmental organizations and private businesses. For instance, how are assistance efforts hindered by the lack of clear U.S. goals and lack of long-term U.S. commitment to development? Are the impacts of large amounts of aid proportionately effective? How can assistance programs be evaluated to determine if they were successful? And what roles can private businesses and nongovernmental organizations be expected to play in increasing food production?

Issue 10: U.S. foreign aid to Africa operates without clear goals and objectives and without a long-term commitment to development.

### **Preliminary Findings**

- Foreign aid benefits the United States substantially, both economically and politically, but this has not been made clear to the American public. Therefore, development assistance remains controversial, with little constituency for reform.
- Increasing agricultural production, as well as food security, in sub-Saharan Africa requires a long-term commitment to development with continued technical support and assured funding.
- Long-term technical assistance is difficult to provide under the short-term political conditions common to American foreign assistance.
- Development priorities and initiatives shift from administration to administration as foreign policy goals and AID staff change.

- Countries' eligibility for technical assistance changes, sometimes frequently, as a result of internal and external political changes.
- Administration policies may conflict with previously legislated goals; competition between old and new initiatives and thus staff confusion may result.
- Foreign aid projects usually are too short to have long-term, positive impacts on the difficult agricultural problems in sub-Saharan Africa.
- The trend in length of projects conducted by AID cannot be determined because of problems with the data base.

#### Discussion

American foreign aid provides substantial benefits to the United States. For this reason, it has received the strong support of every administration since World War II.

Congress has been less steadfast in its support of U.S. foreign aid. Historically, U.S. security and political benefits have been regarded as the most important ones. Some Members recognize that large amounts of U.S. foreign aid money return to the United States as purchases of U.S. goods and services. In fact, procurement policies ensure that most foreign aid funds are spent in the United States. Therefore, foreign aid has economic benefits at home and overseas. Other Members of Congress have advocated foreign aid on humanitarian grounds.

Still other Members of Congress can be described as:

- advocates of particular development strategies—e. g., women in development;
- supporters of new approaches—e.g., the African Development Foundation;
- uninterested parties because the foreign aid budget item is relatively small; and
- committed adversaries on the grounds that foreign aid is a bad investment, harming the

United States and the recipients (Morss and Morss, 1982).

The American public, as a whole, is not an enthusiastic or reliable supporter of foreign aid. Less support exists for foreign aid than any other type of Federal spending according to recent Louis Harris surveys (Morss and Morss, 1982).

The diversity of congressional interests, the lack of a strong public constituency, and most Presidents' disinterest in the specifics of foreign aid bills have led to "grab-bag" legislation. Currently, AID development projects must meet some 75 legislative and statutory requirements before approval (Commission on Security and Economic Assistance, 1983). In addition, Congress has demonstrated a wide array of concerns during reviews of U.S. foreign aid, "concerns that frequently have little to do with the congressional intent reflected in its own aid legislation" (Morss and Morss, 1982). In recent years so little congressional interest has existed that it was difficult to enact foreign aid authorization and appropriation bills (Newels, 1984).

U.S. foreign assistance programs that have emerged from these considerations are designed to: 1) promote support for humanitarian relief efforts, 2) foster export expansion, 3) enhance a stable international economy, 4) expand support from other Western donors through multilateral institutions, 5) support regional peace initiatives, 6) provide security for friendly governments, and 7) counter Soviet and Soviet-supported influence. These goals sometimes are not compatible nor are they generally translated into measurable objectives in set time frames. In addition, their relative priorities and relative effectiveness are open to varying interpretations (Wilhelm, 1983).

U.S. foreign aid is now near an all-time-low level as measured in percentage of gross national product and constant dollars. The proportion of bilateral development funding aimed at Africa has decreased recently, but other programs for Africa have increased due to larger emergency food deliveries under Public Law 480 and proposals for new programs (Newels, 1984). In 1983, the Secretary of State established a bipartisan commission to conduct a comprehensive review of the goals and objectives of American programs and

to identify ways to increase support for them. The Carlucci Commission concluded that:

In Africa there is an economic crisis of major dimensions that will call for a serious long-term response by the U. S., the donor, and the recipient countries. Failure to deal with these problems can have serious security implications (Commission on Security and Economic Assistance,1983).

The Commission also suggested that the United States:

- increase foreign aid funding;
- expand support for foreign aid among Federal leaders and the public;
- use aid to support economic policy reforms and promote the private sector;
- increase concessionality of military aid;
- increase flexibility in aid;
- establish a new Federal agency to coordinate and administer foreign aid programs;
- adopt a country approach to aid;
- increase emphasis on science and technology, human resources development, and institution-building;
- support development objectives of the Food for Peace Program;
- ensure integrated programs for sub-Saharan Africa and the Caribbean Region; and
- improve evaluation of bilateral and multilateral programs (Commission on Security and Economic Assistance, 1983).

The proposed Federal agency was the Commission's recommendation for dealing with the fragmented nature of foreign assistance programs. It reflects Commission members' perceptions that all forms of foreign assistance need to be integrated into programs in which funding levels, related activities, and degree of concessionality are based on both the recipients' needs and U.S. objectives (Wilhelm, 1983). This proposed agency has not been established, although some of the Commission's other recommendations have been implemented.

The Agency for International Development (AID) is charged with implementing most U.S. bilateral foreign aid policies. The congressional mandates in 1973 known as "New Directions" introduced new concerns into the design of AID programs (Morss and Morss, 1982). Interpreta-

tion of the legislation has been difficult, with AID favoring projects with visible short-term effects rather than long-term projects with less immediate benefits (Stokeld, 1982). In addition, short-term shifts in the proportion of assistance designated for military, economic security, and development programs occur and are controversial (Newels, 1984; Commission on Security and Economic Assistance, 1983).

The eligibility of particular countries for foreign assistance changes with political changes in the United States and in the host country. For example, assistance to Tanzania and Ethiopia was affected by shifts to socialist policies in these countries, despite the avowed humanitarian purposes of some assistance. This problem is likely to increase as the U.S. Government funds larger portions of the private and voluntary organizations' budgets. Their ability to respond to humanitarian needs for agricultural assistance may be decreased by their closer ties to U.S. foreign policy.

The effects of such policy shifts on technology can sometimes be direct. For example, Congress enacted section 107 of the International Development and Food Assistance Act of 1975, authorizing AID to expand its efforts with capital-saving technology. AID has emphasized private sector initiatives since that time and some AID staff perceive that the two efforts conflict (U.S. GAO, 1984).

Agriculture is the central focus of much American aid to Africa, reflecting a wide consensus inside and outside of the American Government that agricultural development is the most important long-term concern for the entire African continent (Whitaker, 1984). AID allocates about 60 percent of its African assistance to agriculture, or approximately \$150 million in fiscal year 1985 (U.S. Congress, Committee on Appropriations, 1984). Debate continues whether development assistance to Africa remains too low or is poorly balanced with other types of assistance.

The U.S. Government has struggled to determine the most effective type of rural development aid for decades (Ruttan, 1982; 1983). Community development was emphasized in the 1950s. In the 1960s, donors supported narrower agricultural production programs and institution-building.

"Integrated rural development" was popular in the early 1970s, only to be replaced by the "basic needs" approach in 1973. Now the "basic needs" approach is being severely questioned. The number of families whose most basic needs are not met continues to grow (Ruttan, World Development 12(4), 1984) and, especially in Africa, reliable food surpluses do not exist (Eicher and Baker, 1982).

Finding an appropriate niche for American involvement is essential, given a limited foreign aid budget and continuing severe food problems (Falcon, 1984). The Carlucci Commission notes that the United States is virtually alone among bilateral donors in supporting projects developed by resident staff. Critics claim that this approach leads to fragmentation. For example, AID supports approximately 1,000 projects in Africa now (Eicher, October 1984). Suggestions for new approaches include:

- greater multilateral coordination with individual donors assuming responsibility for aid to certain regions of the world or sectors of activity; and
- greater emphasis on general long-term program aid instead of specific project aid, especially in agricultural research.

Issue 11: The evaluation process used by AID does not enable a consistent determination of the effectiveness of the Agency in providing technologies to low-resource producers.

#### **Preliminary Findings**

- AID evaluations prior to 1980 measured project inputs and outputs and were weak on any kind of qualitative or quantitative information regarding other types of positive outcomes of the AID projects.
- AID's Africa Bureau developed guidelines in 1982 for evaluating the rate of technology adoption for its projects. The guidelines have not been used consistently and AID plans to discontinue them.
- Too much attention is paid to starting new projects and not enough to implementing and evaluating existing ones.

- The problem at AID missions is part attitudinal and part staffing; most missions have too many obligations for the size of their staffs.
- Evaluation reports commonly are not taken seriously by the mission directors. They apparently consider evaluation a peripheral activity, do not have full-time evaluation officers, and see little value in using evaluations in the design stage of new projects.
- Host country counterparts usually do not participate in the evaluation process because the process is seen as being negative and they do not wish to be involved in a process that may influence their own standing in the government.
- Intended beneficiaries of projects are seldom included in the evaluation process. This participation could assist project implementors in determining socioeconomic impacts.
- Duration of projects is too short to measure results effectively and establish continuity; feedback is needed during the life of the project.
- AID handbooks require that AID missions use past project experience in designing new projects. However, this guidance is not consistently followed or enforced by AID.
- African ministry planners and beneficiaries are seldom involved in the evaluation and design phases of AID projects.
- In-service training of AID mission staff may not include guideline; on evaluation procedures and the importance of feedback planning.

#### Discussion

AID's effectiveness in transferring technology appropriate to increasing food production by low-resource producers in Africa can be measured by its own project evaluations. Any agency involved in project design and implementation must be able to learn constructive lessons from past performance to improve ongoing and future project design. Through interviews and other research, OTA examined the AID evaluation process.

Stressing field autonomy, the AID missions determine which projects in their respective portfolios require mid-term and final evaluations. The projects selected represent the development emphasis of the mission's Country Development Strategy Statement (CDSS). For example, a mission concentrating a substantial portion of its budget on FSR would presumably want to identify a larger number of its FSR projects for evaluation.

The Africa Bureau of AID/Washington receives 2-year evaluation plans of each mission. The Bureau identifies larger issue areas for evaluation and determines if the composite evaluation plans from each mission will gather the necessary information. If not, the Bureau requests additional information or conducts its own evaluation to gather the necessary information. The Bureau then approves the respective mission plans for the review of the Center for Development Information and Evaluation (CDIE).

The CDIE oversees AID's evaluation process. This center reviews mission evaluation plans and the Africa Bureau, conducts assessments (impact evaluations on selected topics), and provides information on development theory, past AID projects, and technical data through its development information system.

In 1979, AID re-established its Africa Bureau evaluation unit. Its evaluation officer requested a study by the U.S. Department of Commerce Census Bureau on the effectiveness of the AID evaluation process regarding its appropriate technology projects. The Census Bureau concluded that AID missions did not use project evaluations because the evaluations contained little information for subsequent project design. Specifically, "technology transfer for the purpose of the project was not defined, adoption was not defined, the variables needed for monitoring adoption were not identified and the degree to which technology existed prior to project implementation had not been measured" (U.S. Department of Commerce, 1983). A separate report also concluded that the AID evaluation process produced no comparative or consistent data with which to compare projects within the AID portfolio (Associates in Rural Development, 1982). Finally, an AID-commissioned impact assessment concluded that the absence of information on project characteristics makes a comparative analysis of AID's

projects difficult (Crawford and Barclay, 1982). However, a more fundamental question remains on the value of the original project goals and objectives. Crawford and Barclay (1982) identified some of the major problems with evaluating the effectiveness and goals of AID in conducting research for small farmers.

[T]here [is no] guarantee that the original project objectives are realistic and can themselves serve as an adequate basis for evaluating project performance. Project goals and purposes are sometimes written to guide the authorization of project funds rather than to guide project evaluation. The majority of sample projects, at least nominally, concentrated on research whose ultimate goal was to benefit small farmers. Generally, the projects concentrated on crops that small farmers grew or worked in resource poor areas where small farmers and the rural poor comprise most of the population. Except to note that this was the project goal, however, evaluations gave little attention to measuring the success of such efforts or evaluating alternative methods of reaching the smallscale farmer (Crawford and Barclay,

In an attempt to develop procedures that AID could use to collect uniform data for project comparison, the Census Bureau proposed 11 guidelines that all evaluations were to address. The guidelines contained categories for the measurement of those constraints the project attempted to overcome, technologies introduced and replaced, justification for the assumptions that the beneficiaries would adopt the technologies, post-project adoption rates, the type of technology transfer system, and the impact on the intended beneficiaries. The guidelines were approved for use by the Africa Bureau in March 1982.

Recent OTA interviews with AID officials indicate that AID has not consistently used the guidelines and feels that the guidelines should be discontinued. In their place, AID will propose that evaluations outline some general problems so that common concerns and experiences can be compiled for use by project design personnel. However, this approach may not provide comparative data to determine the impacts of projects upon intended beneficiaries or excluded groups, especially women.

OTA finds that sufficient evidence exists to indicate that at present the AID evaluation process serves little purpose in assisting project design officers and certainly gives little comparative information of the impact of AID's projects upon the rural poor. AID's efforts to strenghten its evaluation capacity could be strongly supported. Within Congress, AID, and host country ministries, the evaluation process could be seen in a more positive perspective. An audit process is less effective than one that encourages the use of qualitative and quantitative information for improved project design. However, AID could do much more to ensure that the beneficial or adverse impacts upon groups of rural poor are measured. The most beneficial change would be to involve host country planners and project beneficiaries in the evaluation process in a manner that allows objective criticism of projects without punitive responses from the government or AID.

Issue 12: The results of recipient countries receiving large quantities of confessional food aid are not clear.

### **Preliminary Findings**

- Food aid is an important type of development assistance. The need for food aid in Africa will persist because of constraints on agricultural production in drought-prone and other areas.
- The impacts of confessional food aid sometimes are negative; food aid can displace indigenous farmers from the marketplace, shift dietary preferences, decrease incentives for increasing local food production, and discourage recipient governments from undertaking needed agricultural reform.
- Goals of donor and recipient countries, and long-term versus short-term interests of each, may conflict when donors provide large amounts of food aid regularly. For example, arguments exist whether commodity benefits have been achieved along with development benefits in the Public Law 480 programs.
- Development programs may be forced to compete with food aid programs, given the downward trend in overall foreign assistance.

Certain U.S. States benefit substantially from sales of Public Law 480 commodities. Experts disagree regarding the current and future importance of Public Law 480 in disposal of U.S. surpluses.

#### Discussion

In 1984, the U.S. celebrated the 30th anniversary of its primary food aid program, Food for Peace (the Agricultural Trade Development and Assistance Act of 1954, Public Law 480). Amendments during its three decades have shifted the program from local currencies to dollars, deleted references to the use of American surpluses, and tied food aid to development assistance and policy reform in recipient countries.

Public Law 480 has three components as a result of these amendments. Title I provides favorable terms for financing private sales of commodities to "friendly" countries. Title II authorizes emergency donations handled by international agencies and U.S. private and voluntary groups. Title III provides food for resale and then local use of the proceeds for approved projects or policy initiatives (USDA, July 1984a).

The total African Public Law 480 program in fiscal year 1984 was estimated at \$258.9 million with about one-fifth of that amount supplied as emergency food aid. AID proposed that the program for fiscal year 1985 be funded at \$234.7 million, without including estimates of emergency needs (U.S. Congress, Committee on Appropriations, 1984). The current famine has accelerated shipments of Public Law 480 commodities; allocations approved in the first month of fiscal year 1985 are approximately 75 percent of total shipments in fiscal year 1984 (Cook, 1984). Food aid is expected to be a continuing need in Africa, especially in the areas where climate fluctuates widely and more droughts are probable.

This program has been an important source of emergency food aid for African countries. Also, Public Law 480 benefits the United States substantially: 12 American States each sell approximately \$50 million of agricultural products annually; most other States sell smaller amounts (USDA, July 1984a). Doubts exist, however, about its long-term effects on agricultural development and

whether it is the best method to achieve sometimes conflicting goals. Despite repeated attempts to evaluate Public Law 480's effects on individual countries, the program continues to face charges that:

Public Law 480's main beneficiaries are American farmers and the U.S. merchant marine. Public Law 480 has bankrupted poor farmers, encouraged the welfare ethic in recipient countries and squandered billions of tax dollars (Bovard,1984).

Food aid never constitutes a lasting solution to problems of hunger and food production. It may save lives in emergencies but even then donors might not anticipate needs or make deliveries in a timely fashion. Large quantities may strain the capacity of recipient countries to store and distribute products efficiently (Matzke, 1984; Okigbo, 1982).

Other fundamental questions about food aid are asked. Critics charge that food aid prolongs dependence and hampers efforts to increase food production in recipient countries. The main dangers are:

- encouraging postponement of overdue agricultural reforms in recipient countries, thus creating artificial food "emergencies" and detracting from the effectiveness of agricultural development assistance;
- making domestic markets unpredictable and discouraging local producers from increasing production;
- shifting dietary preferences to wheat accelerates demands for that grain. Many African countries cannot produce wheat for climatic reasons and thus may become permanently dependent on imports; and
- not reaching the people in most need nutritionally (Clay and Singer, 1982; Matzke, 1984).

No consensus exists on these broad questions. But Clay and Singer (1982) note that widespread criticism of Public Law 480 has been replaced by more ambivalent views of its potential positive and negative effects.

The General Accounting Office has investigated many aspects of this program, publishing 28 reports from 1976 to early 1984. Their findings include:



Photo credit: F. Botts of United Nations/FAO

The role of food aid continues to be controversial. As an emergency measure, it is crucial during times of drought and famine. However, the long-term effects may produce disincentives to increased food production. Here, Burkina Faso villagers collect emergency food aid during the Sahelian drought of 1973.

- U.S. costs could be cut by more timely collection of local currencies, altering cargo preference laws, and shipping with long-term country and regional requirements in mind;
- limited attempts to use Title III for agricultural reform are unsuccessful and constrained by U.S. and recipient country administrative problems;
- Public Law 480 funds could be used in innovative ways—e.g., for developing irrigation projects:
- closer watch should be kept on equitable distribution of aid to refugees, monitoring and auditing of commodity transport, and the programs in certain countries; and
- AID needs to document that food aid does not increase disincentives to local food pro-

duction and that sales under Title I help the poor.

Title III, the Food for Development section, is intended to contribute to long-term agricultural gains in sub-Saharan Africa. Its multi-year agreements are unique in Public Law 480 programs. To the extent that these funds are used for agricultural projects, agricultural technology will play an important role in the program. The role of projects versus policy planning has been the subject of considerable debate within the program, however. The Office of Management and Budget has been a major advocate of decreasing project spending, sometimes at odds with the U.S. Department of Agriculture and U.S. AID (Garzon, 1984). Criticisms are made that projects are poorly

formulated. They are not commonly oriented to technologies suitable for low-resource producers.

The number of countries that take part in Title III programs is small: only six agreements were signed in its first 4 years; two of these were in sub-Saharan Africa (Senegal and Sudan). Other potential recipients in Africa "are unable to sign agreements because of internal instability, political differences with the USA or reasons of political ideology" (Garzon, 1984). Since 1981 when Garzon completed his analysis, the number of countries signing Title III agreements has declined and GAO questions the merits of continuing the program.

Issue 13: Private voluntary and nongovernmental organizations (PVOs) may have particularly useful roles in African agricultural development, but these are neither clear nor constant.

#### **Preliminary Findings**

- PVOs have played a major part in U.S. development assistance, first by providing humanitarian, then social and economic development aid.
- Often their work with technology has been limited due to lack of interest and expertise and a low level of technical back-up, but this is changing.
- The roles of PVOs are shifting as government funds supplement private contributions.
- These shifts may require that more attention be paid to identifying PVOs' particular strengths and to designing, managing, and evaluating projects with these strengths in mind.

#### Discussion

Many PVOs played an important historical role in Africa. The provision of social services, including emergency food relief, new schools, roads, and irrigation facilities, has been an important and successful role for many. For example, "a study covering the 1969 to 1973 period found that church organizations provided about 20 percent of the total hospital and maternity beds in all Africa" (Tendler, 1982). These programs may have had small overall impacts on development

but their local impacts appear to be significant (Sommer, 1977).

In the past **20** years many PVOs shifted their work from disaster and food relief toward development assistance. This shift can be attributed both to the PVOs' assessments of the roots of poverty and to AID's congressionally mandated attempts to bring PVOs into the development process. Now AID provides PVOs with several hundred million dollars annually. Twelve to sixteen percent of AID's development and disaster assistance funding is available to PVOs due to **1981** congressional action (U.S. AID, May 1982a).

Private voluntary organizations are diverse. They vary in size, budget, ideology, degree of specialization and expertise, use of volunteers, age, program content, structure, and style of operation. The large disaster and development groups, such as CARE and Catholic Relief Services, generally have large budgets and close ties to the U.S. Government. Often the religious PVOs generally are smaller, but have large numbers of people located in villages. For example, about 8,450 American missionaries work in Africa (Hayden, 1984). Humanitarian groups, like religious PVOs, mainly rely on private contributions. A distinct set of these organizations focuses specifically on technical assistance-e.g., Volunteers in Technical Assistance (VITA) and Technoserve. In addition, individual PVOs are joined in various permanent and temporary coalitions.

While these differences make generalization difficult, PVOs commonly perceive themselves as a community with common characteristics. One set of features that many American PVOs claim to share is: the lack of public appreciation for their work in developing countries and consequent problems with fund-raising, the predominance of U.S. Government influence, the nature of their leadership, and the difficulties inherent in operating overseas programs (Biddle, 1984).

Another set of characteristics allegedly describes the way PVOs work. These features are accepted inside and outside of the community to such an extent that Tendler (1982) describes them as "articles of faith" (table 5; see also Hyden, 1983). The people who accept these articles advocate an expanded role for PVOs in American development

Table 5.—The Role of Private Voluntary Organizations (PVOs): Articles of Faith

Theme	Assumptions of PVOs
Reaching the poor • Participation •	
	interested in long-term process, not execution of specific tasks
	function to establish process for poor people to gain control of lives
	not interested in output measures of traditional evaluations
	deal "people-to-people," not government-to-government do not channel money through the public sector
	can be flexible and experimental because they are small, not in the public sector, and do not have to show fast results
Local institutions •	have special ability to work with and strengthen local, private institutions
cost	can benefit the poor at lesser cost than large public sector organizations

SOURCE: Adapted from: Judith Tendler, Turning Private Voluntary Organizations into Development Agencies: Questions for Evaluation, U.S. AID Program Evaluation Paper No. 12 (Washington, DC U.S. AID, April 1982)

assistance. Most aid recipients appear to agree that PVO aid is flexible, honest, prompt, coordinated with other efforts, available to needy and remote areas, and open to experimentation (Sommer, 1977). Critics note, however, that PVOs do not necessarily exhibit such features as flexibility and continuity. Therefore, the degree to which these features are accurate is important in considering the future role of PVOs in development assistance.

Problems in evaluation have hindered a clear understanding of what PVOs do well and what they do uniquely. Evaluations of PVO work have been a continuing concern of donors, and the cohesiveness of the PVO community is illustrated by its collective lack of enthusiasm in responding to these concerns. Often external evaluations are feared because of their potential for diverting efforts from "important" activities, because they represent an outside intrusion, because they may affect the organization negatively, or because they are perceived to be highly political (Tendler, 1982). The 1973 Foreign Assistance Act began the trend to regular evaluation. As AID made more money available to PVOs, it also required greater accountability. Difficulties persist in measuring project significance versus operational performance and in including intended beneficiaries in the evaluation process (Sommer, 1977).

Relations between governments and PVOs have changed as governments have come to rely more upon them. PVOs often maintain an adversarial rhetoric about their advantages over government assistance and their need for independence. In fact, however, the operations of many groups have become closely tied to government aid in various ways. Some of the larger relief organizations receive nearly 80 percent of their funds from the U.S. Government (Sommer, 1977).

Government/PVO relations also take other forms. In some cases, PVOs serve as innovators from which governments learn and replicate projects. This role seems less common than PVOs contend, however, and perhaps is limited to new PVOs in early stages of growth. In other cases, PVOs serve as precursors to governments, filling a need until governments are able or willing to address the same problems. PVO/government relations can be categorized more generally and completely as complementary, filling unoccupied territory, competitive, brokering, replicating, or government takeover (Tendler, 1982).

Many of these relations are replete with ambivalence. Some PVOs refuse all government funds to avoid: 1) compromising their programs, 2) appearing to be linked to official U.S. Government policy, and 3) accepting government planning and evaluation methods.

PVO involvement in agriculture has increased recently. For example, several groups made particular contributions in bringing "Green Revolution" technology to the poor (Sommer, 1977).

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Important differences exist between the Paul Copps and PVCs, too: 1) the comparative overseas inexperience of most Paul Copps voluntates: 2) the last of fractivities memory within the organization due to its 2-year tours and 5-year staffing tales, and 3) the greater security provided by Pederal funding. CHECKER CONTRACTOR CONTRACTOR

The Peace Corps was created in 1968 to .....

- help the people of interested countile and the most of the people of the

Since 1961, at least 100,000 Americans but a served in poore than 90 countries. Today these are some 5,400 volunteers and trainees in 60 nations, 2,400 of whom work in 23 nations in sub-Saharan Africa (U.S. Peace Corps, 1984a)

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However, Tendler's (1982) analysis suggests that agricultural assistance has certain characteristics that may make PVO success in this area difficult. Many agricultural projects require a high degree of expertise. This is not compatible necessarily with the more generalist nature of many PVOs. It appears that the benefits of-agricultural projects are especially vulnerable to monopoly by the rich and, while PVOs are generally regarded as particularly sensitive to reaching the poor, sometimes this cannot be documented. Many within the PVO community dispute Tendler's findings. They argue that limited agricultural expertise is required for

work with simple technology for low-resource food producers and that professionalism is rising among PVO staff.

Good relations and frequent interactions with large government donors are particularly important in relation to technical areas such as agricultural research. The smallness of most PVOs means that they must rely on the large donors for stateof-the-art information on effective development methods. In most cases, PVOs have limited support systems to provide technical information to volunteers in the field. Therefore, cooperation,

not competition, is likely to benefit large donors and PVOs.

Some assert that "governments stand to benefit tremendously by allowing private and voluntary efforts to take root in society and thereby provide effective entry points for public sector inputs" (Hyden, 1983). How best to accomplish this is not clear. Certain trends in PVO aid exist: 1) greater attention to long-term development, 2) accepting professional consulting roles, and 3) greater recognition that development education in the United States is important. If PVOs continue along this route, they would continue to supplement government aid programs but perhaps lose their pioneering role (Sommer, 1977). Their consulting role is likely to bring them into greater conflict with for-profit firms engaged in similar work.

Sommer urges that American PVOs seek new roles, cooperating with other PVOs worldwide. Such cooperation, especially with local African PVOs, is an explicit objective of some groups. American PVO leaders, however, note the difficulties of coordinating international and local efforts (Biddle, 1984). Special considerations apply to working with African PVOs. Generally, local PVOs are not strong. They have received little recognition in their own countries and are weaker than those in other developing countries. They may offer an important way to compensate for government failures and complement more appropriate government efforts, but they will need outside assistance for some time in order to develop a stronger local base (Hyden, 1983).

Issue 14: The extent to which American businesses will provide technical assistance to low-resource food producers is limited.

#### **Preliminary Findings**

- The U.S. Government is beginning a major initiative to bring American private enterprise into development assistance, but it appears that most investment will be outside of the agricultural sector.
- . Technology developed by multinational firms for poor countries often emphasizes capital intensive inputs rather than technologies more appropriate to the needs of the low-resource producers.

- Private investment generally goes to more wealthy developing countries with more developed infrastructures, more developed markets, and greater political stability.
- Problems of accessibility, limited capital, and needs for varied packaging make low-resource producer markets unattractive to agribusinesses.
- Incompatibility exists between the profit-maximizing strategies of agribusiness and risk-aversion practices of low-resource producers.
- U.S. private sector involvement in agricultural technology for low-resource farmers in sub-Saharan Africa is primarily in the form of development assistance programs financed through the U.S. Agency for International Development.
- Certain critical components of agricultural development assistance probably will not and cannot be provided by the private sector.
   Therefore, a unique obligation remains for the Federal Government.

#### **Discussion**

The Federal Government is encouraging the U.S. private sector to invest in low-income developing countries. It has established such bodies as the Bureau of Private Enterprise within the U.S. Agency for International Development and the Overseas Private Investment Corporation (OPIC). The objective of encouraging U.S. private sector investment in developing countries is to boost trade, create jobs, nurture indigenous entrepreneurial activity, develop management skills, and provide increased capital flows into countries.

Private enterprise is seen as "the engine that makes growth occur most quickly" (U.S. AID, May 1982b). The focus of these initiatives will be on those developing countries with more developed infrastructures and markets and which display sociopolitical atmospheres conducive to free market initiatives. As a result, the primary beneficiaries will likely be the relatively wealthy countries in the developing world, despite efforts to encourage investments in the poorest countries.

While the goals mentioned above would benefit an African country's overall economy, the abil-

ity of U.S. private enterprise to benefit the agricultural sector directly, and in particular assist low-resource producers in increasing food productivity, is uncertain.

Direct private investment in agriculture in Africa historically has been in large plantation-type agriculture emphasizing export crops. Even in this area, however, investments have been limited in recent years largely due to concerns over nationalization or other government interventions. Rather, most transactions have been sales of inputs and purchases of outputs for processing (Lipton, 1977a).

While up to 90 percent of farming in Africa is done by the traditional sector, this group remains a "peripheral" market for agribusiness products such as seeds, fertilizer, agricultural chemicals, mechanical motive power, and processing equipment (Turner, 1984). Only about 10 percent of purchased farm inputs in Third World countries go to farmers cultivating under 10 acres of land (Lipton, 1977b).

While the low-resource producer markets for agricultural inputs are potentially very large, they are not spectacularly lucrative. Western-based suppliers face a variety of problems including:

- Problems of accessibility, both physical and mental: Poorly developed infrastructures and the remoteness of many producers result in high transportation costs. Making low-resource producers aware of available products and encouraging them to use them can cause further problems with inappropriate scale of use.
- Possible unsuitability of available technologies: Most technology is designed around
  Western (capital intensive) agricultural systems and is not suitable for low-resource producers in developing countries.
- 3. The pattern of government policies and priorities in poor countries: In many countries there is a reliance on quasi-governmental bodies to handle distribution and purchases. There are also inadequate incentives for food production in the rural sector in most countries (Lipton, 1977b).

The great bulk of world trade in agricultural inputs is between developed countries. As such,

the products of agribusiness are designed to meet the needs of developed country commercial agriculture rather than those of the peasant farmer. The technologies developed are most often inappropriate for the rural sector in sub-Saharan Africa and can cause serious problems. "The increased use of agricultural inputs [tends] to modify and, in some cases, distort the farm structure in these countries to accommodate the new inputs" (Clayton, 1977).

Western manufacturers, in general, have difficulty adapting to low-resource producer markets. In particular, conflicts arise between the industries' desire to exploit economies of scale in research, design, transport, and storage, and their need to adapt to low-resource producers' input requirements and local circumstances (Mackintosh, 1977). Low-resource producers require a multitude of package types, chemical formulations, languages, soil conditions, and active ingredients. Providing safety instruction and follow-up monitoring, particularly on potentially toxic inputs, present further problems (Lipton, 1977d).

Limited liquidity and difficulties in obtaining credit cause serious problems for businesses trying to expand markets to low-resource producers. Perhaps more difficult to overcome, however, is the divergence between profit-maximizing strategies of agribusiness firms and the risk-aversion practices of low-resource producers.

[A]gribusiness has been conditioned by and has responded to the capitalistic, profit maximizing agriculture of the developed world. The operating environment of the peasant farmer is very different from this. [They] often operate within a vicious cycle of poverty which limits [their] farming objectives and opportunities for farm inputs. [Their] energies are constrained by limited knowledge, inadequate land and capital resources, a risky physical economic environment and inadequate infrastructure (Clayton, 1977).

To take advantage of the potential traditional sector market, it is essential to account for the needs of the low-resource producer, Clayton (1977) suggests some steps that should be taken:

 adapt farm inputs to match the scale of peasant farming,

- **2.** improve the marketing and distribution of inputs to the advantage of small farmers, and
- temper straight commercial objectives to take account of the real development needs of poor countries.

In emphasizing the role of private enterprise as an agent for development in Africa, some people believe that the U.S. comparative advantage in agriculture and the major importance of agriculture to African economies make this sector an appropriate focus for U.S. agribusiness involvement (Andreas Task Force, 1984). However, the technologies and agricultural system that have enabled the United States to become the "breadbasket of the world" are not necessarily transferable to Africa. Thus the idea of comparative advantage, at least in terms of technology transfer, loses validity, Witness OPIC's efforts to expand its insurance and lending for agricultural projects but its difficulty in finding suitable projects (Andreas Task Force, 1984). OPIC's 1983 annual report suggests that of 104 projects supported, only 9 were located in sub-Saharan Africa, and of these none were directly related to agriculture.

The current development agency focus on rural development projects has provided a boom to those businesses who produce for low-resource producers, the so-called "appropriate technology" firms. Indications are, however, that most of these exporting firms lie outside the United States. Many operate in countries that have historic colonial ties to their markets, although India and China present serious competition because of their large domestic markets that support export sales (Turner, 1984).

The United States also seems to be disadvantaged due to a more contentious factor—the practice of certain countries (e.g., France and Japan) to heavily link their foreign aid policies to their industrial policies in an effort to expand their markets into developing countries. The result has been a frustration on the part of American firms who think they are losing ground in developing-country markets as a result. This has prompted increased pressure on the U.S. Government to practice a similar strateg, (U.S. Congress, Joint Economic Committee, 1982; Commission on Security and Economic Assistance, 1983). For the

most part, the United States has refrained from linking its foreign aid policies and industrial policies because it recognizes the need to "press hard for free markets, open access to markets, and for the overall benefits of comparative economic advantage in producing and distributing the free world's products and services" (Andreas Task Force, 1984).

The vast majority of agricultural equipment sales to African countries come from Western manufacturers. United Nations figures indicate that of the estimated \$1 billion of agricultural equipment sold to Africa (most representing tractors and tractor-drawn implements for the commercial agricultural sector), local manufacturers account for only \$150 million (Turner, 1984). There is a growing sense, however, that "largescale imports of basic equipment can only be a short- to medium-term solution to supplying the African farmer. If programs to improve productivity are to be sustained, equipment will have to be supplied from within Africa itself for foreign exchange consideration if nothing else" (Turner. 1984),

While it is unlikely that most African countries will be able to develop indigenous industries to produce large equipment in the near future, the potential for further development of smaller scale industries, especially those that could meet the needs of low-resource producers (e.g., small-scale machinery, implements, and fertilizers) can be seen as a realistic short-term goal. However, problems have been encountered by such businesses currently operating in Africa. A 1983 U.N. Industrial Development Organization (UNIDO) report states that the approximately 70 companies in Africa producing for the traditional sector were "in crisis, with nearly all facing financial and structural difficulties and many in danger of going bankrupt or being forced to diversify out of agricultural machinery supply."

Many of the problems these companies face are common to much of African industry: shortage of spare parts and raw materials, and a lack of technical and management skills. These latter constraints provide an area where U.S. private sector involvement could prove very useful, such as the International Executive Service Corps (IESC).

Other problems exist that are particular to producing for the low-resource producer: general insolvency of the clients and consequent limited market size. In addition, government policies have sometimes exacerbated problems (Turner, 1984). These problems would also be encountered by U.S. investments and are, in large part, responsible for the limited investment in African countries. Sub-Saharan Africa represents a mere 2 percent of total U.S. direct investment abroad (Stokeld, 1982).

The above analysis provides a rather skeptical view of any extensive U.S. private industry involvement in Africa. Perhaps it should be clarified that this skepticism is focused on the ability of U.S. agribusiness to assist directly with the traditional African agricultural sector. There are areas of agricultural sector development where U.S. private investment may prove much more effective

and profitable, particularly in such areas as food processing and marketing infrastructure. However, in developing mechanized food processing operations, consideration should be given to the impact on the low-resource producers, particularly potential adverse impacts on income generation through their own processing activities.

The creation of a free enterprise environment may result in a greater shift of low-resource producers away from a largely subsistence economy toward a market economy, The greater liquidity and market structure this creates would likely provide increased incentives for private sector investment in low-resource producers. In the meantime, however, profitability in such investments is limited, particularly in the poorer countries in sub-Saharan Africa. As such, increasing productivity in this sector will continue to rely predominantly on investments from the public sector.