

USAID Policy Paper

Pricing, Subsidies, and Related Policies
in Food and Agriculture

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Executive Summary

A. Scope.

This paper describes and analyzes the consequences of certain policies regarding pricing and distribution in markets directly connected with food and agriculture: markets for agricultural inputs, agricultural credit, and food itself. These policies involve interventions found both in LDCs and in developed economies, such as price control, subsidization, public-sector production and distribution, and rationing. These interventions have tended to result in substantial reductions in efficiency and productivity, with little or no benefit to the disadvantaged groups they are often supposed to help. In many cases, the benefits of these policies do not redound to low-income groups, but go to relatively well-off groups instead.

Consistent with U.S. foreign policy, USAID will, through the process of policy dialogue with host-country governments, and through its programs of technical, financial, and commodity assistance, encourage countries to modify such policies so as to minimize governmental intervention in price-formation and distribution systems (except for certain limited circumstances identified in the paper).

The paper recognizes that the achievement of an efficient allocation of resources and of the overall goal of sustained, broadly-based economic growth also often requires complementary reforms, such as the promotion of competition in the private sector, and complementary public investment in basic physical infrastructure, development of human resources, and research, which encourage and facilitate growth in the private sector. Policy dialogue and assistance programs can also help achieve these complementary objectives. The paper also recognizes that the political environment will often constrain the *degree* of policy change possible over the short term, and that interim steps toward longer-term goals for policy reform may be the best feasible course. A. I. D. should, however, persist in seeking policy changes favoring competitive and free markets.

USAID will provide technical assistance and training to strengthen the capacity of host-country governments and USAID Missions to analyze the effects of existing and alternative policies regarding pricing and distribution related to food and agriculture.

B. Food

Food subsidies do not reduce the cost of food, but merely shift this cost's financial burden through the fiscal system back onto the public (or onto donors, thus depriving the public of the benefits of alternative uses of aid).

Therefore, the *net* benefits received by consumers from broad food subsidies are smaller and distributed differently than are the gross benefits of price reductions. Meeting special nutritional needs through such broad programs is costly and inefficient.

Therefore, it is the objective of USAID policy to support food distribution programs that:

are targeted to particular groups with special and substantial unmet nutritional needs,

do not rely on suppression of producers' prices,

do not regulate food prices or the bulk of the private food market, but instead use market mechanisms so far as possible, and

procure supplies at minimum economic cost. The secular level and the

stability of farmgate prices of foodstuffs are adversely affected by general economic policies in many LDCs and by natural causes, such as seasonal crop cycles and climatic fluctuations. Efficient price-formation by a competitive private-sector trading system can, however, mitigate these adverse effects. Therefore, USAID is prepared to assist the creation and development of such systems, where appropriate, through assistance to governmental provision of infrastructure and technical assistance in the area of marketing.

A government may nonetheless decide to accumulate a certain amount of food to guard against the coincidence of a poor harvest and a scarcity of foreign supplies (commercial and concessional). The often high costs of storing and managing such reserves must be weighed carefully against alternative approaches to enhancing short-term food security, such as accumulating foreign exchange reserves or participating in the IMF's cereal import facility.

C. Agricultural Inputs

Governments sometimes attempt to control (or to "subsidize") the prices of agricultural inputs to compensate the farm sector for its losses under food-price regulations. However, the farm sector's compensation is generally not complete, and benefits received are concentrated on better-off farmers who buy more controlled inputs. Furthermore, the input supply system must also be subsidized to compensate for reduced input prices. The supply system's dependence on fiscal subsidies (and thus frequently on foreign aid) can reduce its effectiveness and thus hamper agricultural productivity.

Therefore, it is USAID policy to encourage the freeing of output prices where they are controlled, thereby eliminating the need to compensate farmers, rather than to compound the inefficiency of the intervention in output markets by adding other interventions in input markets.

Temporary subsidization of the experimental use of inputs may be justified within projects that introduce new techniques to farmers. However, prices should not be set below the farmers' (limited) willingness to pay for new inputs and should be increased to market levels by the end of the project. If it appears likely that a project's input subsidy will lead to lasting economy-wide price control on inputs, then another method of inducing farmers to participate in the project (e.g., insurance) should be considered.

D. Finance

The primary purpose of a country's financial institutions should be to mobilize and to allocate private indigenous financial resources. Interest-rate controls prevent financial institutions from doing this efficiently. Savers respond to higher real interest rates by increasing deposits in financial institutions. Further, farmers are willing to pay interest rates charged in unregulated markets when profitable investments are available and credit and repayment are scheduled conveniently. However, controls that artificially hold interest rates down discourage saving and lead to credit rationing which often excludes small borrowers that some programs were intended to help. Furthermore, regulated rates are sometimes below the rate of inflation. Negative real interest rates contribute to the decapitalization of financial institutions.

Therefore, interest rates should be set according to the market demand for funds, so that as much resources will be mobilized as the economy's borrowers are willing to pay for. One condition for support from USAID to or through financial institutions is that interest rates be set according to these principles or that substantial measures be taken to reduce interest-rate controls where they have adverse affects on mobilization and allocation of funds. USAID is prepared to assist the development of innovative institutional approaches to meeting the credit needs of small farmers and other small enterprises in ways that do not distort the price of credit.

I. Introduction

A. Purposes and Scope

The purposes of this policy paper are to state on a general level some propositions about the consequences of certain economic policies affecting food and agriculture in less developed countries (LDCs), and to establish, subject to the Ambassadors' authority, certain goals for USAID Missions to pursue in the process of policy dialogue with host governments. Through policy dialogue as well as technical, financial, and commodity assistance, USAID will encourage host-country governments to modify policies that impede economic efficiency and sustained, broadly-based economic growth. In cases where it is judged that success in achieving a project's purposes would require a policy environment that does not exist and cannot be created, however, USAID will not provide (or will withdraw) support.

As is true of efforts to lift technical and resource constraints on economic development, the effort to lift constraints posed by counterproductive economic policies cannot be expected to produce major results overnight. There are real and substantial reasons for the resistance to policy reform: the potential for political opposition from major groups that benefit (or perceive a benefit) from existing policies, for example. Overcoming such obstacles is the object of the day-to-day exercise of ingenuity in politics and in the design of policy dialogue and of foreign assistance. For the implementation of policy dialogue and reform to be successful, it must identify constructive interim solutions to policy problems and recognize the relatively long time-frame of the process of improving upon each interim solution in pursuit of desirable goals. It is hoped that this policy paper will assist efforts at policy reform by more clearly stating certain reforms' underlying rationale and by increasing the emphasis on their practical importance.¹ These efforts must take place within the framework of the overall dialogue between the U.S. Government and USAID's host governments, and therefore must be consistent with overall U.S. foreign policy and with U.S. policy toward the host countries.

The scope of this paper is narrowly limited to certain governmental pricing and subsidization policies in food and agriculture. Some closely related subjects are therefore not treated fully in this particular paper. For example, this paper does not comprehensively review the problems of private markets in LDCs, nor does it attempt to give complete guidance on promotion of more competitive market structures, on promotion of private-sector involvement, or on the role of parastatals and other public-sector agencies. There are many improvements in such areas that would complement the reforms discussed in the present paper. Such policies and programs, including public investment in agricultural research and physical infrastructure, have been found to be essential to the promotion of growth of the private sector, as well as to achieving broadly-based growth overall. Some of these other topics are discussed in USAID's Policy Papers on Food and Agricultural Development and Private Enterprise Development, or will be discussed in the forthcoming policy paper on Public Enterprise.

Furthermore, the present paper does not analyze the *ideal* governmental role in the area of pricing and subsidization. Rather, the paper's subject is the set of pressing problems caused by some *existing* governmental policies. Therefore, the reforms discussed in this paper are not proposed as a complete policy framework for governments in LDCs or for donors. These reforms are steps that may be complementary with other desirable initiatives, and that may indeed be

¹The concluding action of this paper on "Implementation" briefly describes resources that Missions may draw on to assist in policy analysis and related program design.

the prerequisites of these other initiatives in some cases.

B. The Subject

Although there is a wide range of productive governmental interventions in the development process that may affect and improve markets, the particular area of price formation is one in which many interventions have proved to be counter-productive. Subsidies and related price and distribution controls² adopted by many LDC governments, in such areas as food marketing and distribution, marketing of agricultural inputs, and agricultural credit, have tended to result in substantial reductions in efficiency and productivity, with little or no benefit to the disadvantaged groups they are often supposed to help. In many cases, the benefits of these policies do not redound to low-income groups, but go to relatively well-off groups instead. The gross benefits of these policies tend to be offset by the costs of taxation and other fiscal measures used to pay for any subsidies that may be involved. As a result, *net* benefits are much smaller and may be distributed quite differently than gross benefits.

Government-fixed prices frequently discourage production of valuable outputs and promote instead activities that have excessively high true costs, to the detriment of the economy as a whole and, in the long term if not in the short term, the poor majority in particular. Furthermore, in order to enforce price controls, it is often necessary for the government to intervene directly in the physical distribution system for both inputs and outputs. Distribution controls instituted under price controls (such as rationing) frequently are costly and result in inefficient allocation of resources.

Similar pricing and distribution policies occur in many other markets, such as the markets for the factors of production (land, labor, and capital), markets for manufactured goods (especially those that enter international trade), markets for services (such as electrical power and transport), and the market for foreign currencies. However, pricing and subsidy policies that affect food and agriculture directly are of particular interest to USAID because of this sector's important role in the Agency's policies and programs.

This paper first provides an overview of the economy-wide aspects of pricing and subsidy policies. It then discusses desirable policy reforms in three areas directly related to food and agriculture (food products, agricultural inputs and agricultural credit).

A policy of minimizing governmental intervention in pricing and distribution, using market forces to establish practical prices and allocations, and avoiding public-sector displacement (or preemption) of private firms in distribution of goods will not only reduce the fiscal costs of subsidies but will also allocate resources more efficiently than under the various controls that have been instituted in many LDCs. However, there are some areas where the involvement of the government, including subsidization or direct allocation of goods, may be useful. These are usually cases where, in order to obtain efficient results, individuals find it advantageous to coordinate their activities through collective action and organizations such as governmental agencies and private cooperatives. For example:

Although some types of adaptive research and development of new products are effectively undertaken by the private sector, in general it is difficult for individual investors in agricultural research to retain adequate returns from the knowledge of new agricultural techniques which the research generates. Therefore, it would not be efficient to rely entirely on individuals' funding

² It is useful to distinguish subsidies from price controls. Price control is a *regulation* that controls (or restricts) the price that may legally be paid or received for some good or service. A subsidy is a type of *fiscal outlay* to a firm or household.

of agricultural research. The appropriate amount of agricultural research can be funded only by using private farmers' organizations (where possible) and the government to collect resources;

Given that in the short term special food programs are necessary to reduce severe undernourishment and to assure healthy development of young children, this goal may be more effectively pursued by funding targeted food programs through contributions from private voluntary organizations and/or from the government, rather than solely through uncoordinated individuals' contributions;

The fixed costs of large surface-water irrigation systems are frequently financed through contributions from private water-users' associations and/or from land taxes, rather than through individuals' irrigation fees only. Although this may appear to be a subsidy to water users, it can be an efficient method of finance. Charging individuals water rates sufficient to cover both fixed and operating costs would generally not result in either sufficient investment in irrigation capacity or efficient utilization of existing capacity.³

USAID does not oppose such forms of governmental subsidization where they are appropriately designed and implemented. However, even though the government may provide additional incentives in the form of subsidies, such goods and services should be delivered through private organizations (including non-governmental cooperatives) if they have the potential to be more efficient alternatives to public-sector delivery mechanisms.

When the government does intervene, in the economy, the more efficient form of intervention should be chosen and the intervention should not extend beyond what is needed to achieve the government's specific goals. Therefore, direct, explicit (or "transparent"), and limited subsidization that is tied to producers' performance, or to target groups' special, unmet needs, is generally to be preferred to indirect methods. Methods that attempt to provide benefits indirectly may not provide adequate incentives for production or may not provide the desired benefit to the target groups. Indirect methods may also have unintended effects that are counterproductive or that benefit groups who are not in need of assistance. They are also more difficult to monitor and to evaluate, and therefore are more likely to be continued beyond their intended and useful life than if they were explicit and transparent.

For example, to develop road transportation the government should first consider directly financing the maintenance and construction of roads and reducing regulatory burdens on trucking. Indirect measures, such as artificial reductions in the price of petrol, or restrictions on competing railways, might encourage shippers to switch from rail to petrol-powered trucks. However, these effects would be indirect, uncertain, and difficult to evaluate. The most direct effects of price controls and other restrictions would be instead in the supplies of petrol and of railway transportation. These direct effects would likely be counterproductive from the point of view of developing the overall transportation system, including road transport.

³Similar arguments apply to roads, bridges, and so forth. In cases like these, it may be useful to keep in mind the distinction between a subsidy and a governmental investment. A subsidy is gratuitous payment to a firm or a household. (It is gratuitous in the sense that no goods or services are rendered to the government that provides the subsidy, although as a result of the subsidy, goods or services may be rendered to others, even if not in consideration of, or equal in value to, the subsidy). Governmental investment is the purchase or production of a durable good by the government.

II. Economy-Wide Considerations

It is a basic A. I. D. policy to assist host countries in the creation and development of free, competitive markets to allocate resources efficiently, rather than to support policies that attempt to regulate prices in order to affect the distribution of income among the economy's broad sectors. If income redistribution is viewed as a desirable goal, it is best accomplished by other means. However, governments in both developing and developed countries are tempted to seek to provide immediate increases in the standard of living in several sectors simultaneously, or production incentives for several sectors simultaneously, by shifting spending power from sector to sector through subsidies or price controls.

For example, consider how the following set of hypothetical policies might be advocated (each policy perhaps by a different sponsor), even though the whole set would not necessarily, be adopted.

Because the government seeks to placate the urban population, the consumer's price of food is held down;

Increasing demand for food necessitates promotion of food production by raising the farm-gate price of foodgrains and by lowering the prices of agricultural inputs;

Non-agricultural industries are promoted by sharply raising prices of their outputs (perhaps by raising tariffs or non-tariff barriers on competing imports) and by lowering prices of their inputs, especially imported capital goods;

Because of expanded subsidies, revenues from taxation of domestic sales cannot meet the government's needs, and therefore exports are taxed; and * Because there is a shortage of export earnings for necessary imports, such as capital goods and agricultural inputs, exports are promoted through subsidization or exemption from taxation.

Aside from the problems these policies have individually, the set taken as a whole is self-contradictory. For example:

Fiscal transfers that benefit net buyers of food as a group necessarily make production of food by net sellers less remunerative.

Fiscal transfers to the farm sector necessarily reduce the resources and incentives available to manufacturers.

Protection of the manufacturing sector from imported competition necessarily increases the cost of manufactures to firms and households, especially in agriculture.

Since resources are limited, it is impossible to raise the standard of living in every sector at once or to provide production incentives for every sector simultaneously, merely by shifting incomes or resources from sector to sector.

The limits to the amounts of resources available imply that every action has an "opportunity cost", the value of the best alternative foregone for lack of additional resources. The price-system is best used to measure these opportunity costs, in order to identify the best of the alternative courses of action and thus to maximize the resources' productivity. In an ideal (*i.e.*, hypothetical, if not perfect) economy where each good's price is determined by relatively free and competitive markets, the money-cost of a good could be used as a relatively accurate measure of the market-value of the good's cost in terms of alternative goods, *whatever* those alternative goods would have been.

Without such a means of measurement, it is very difficult to see how one could take account of costs. This is a basic rationale for assisting in the creation of free, competitive markets.

The scarcity of available resources is sometimes disputed by those who argue that the whole set of policies described above could be financed through expansion of credit and implemented through use of unemployed resources or by expanded foreign aid. On the contrary, however, the dominant strands of research on economic policy in developing countries demonstrate that pervasive attempts at price control and subsidization induce misuse, rather than greater use, of available resources.⁴

III.Pricing and Subsidy Policies in Three Sub-Sectors

This section examines pricing and subsidy policies toward food, agricultural inputs, and credit.

A. Food

1. *The Objectives of Food Pricing and Distribution Policies*

USAID's basic objective is to promote sustained, broadly-based economic growth in the countries it assists. Therefore, USAID supports food pricing and distribution policies with the following objectives:

to give domestic producers the incentive to produce as much output as is justified by costs, the demand for food, and considerations of food security;

to distribute food at minimum cost in conformity, by and large, with demand; and

to alleviate undernourishment, especially of vulnerable groups (such as children and pregnant and lactating women).⁵

Many price and distribution controls found in LDCs do not effectively pursue these objectives, or they have consequences counter to those intended. In some cases this may be because the effects of those policies are misunderstood. In other cases, the objectives themselves may be called into question. For example, price control sometimes has the objective of lowering the cost of food to middle- and upper-income consumers. However, it may be doubted that

⁴The misuse of resources caused by external trade policies has been studied more thoroughly than that in any other sector. Perhaps the best summary of findings is that of the multi-country study supported by the OECD's Development Assistance Committee: *Industry and Trade in Some Developing Countries*, by Ian Little, Tibor Scitovsky, and Maurice Scott. See also the various volumes of *Foreign Trade Regimes and Economic Development*, a more recent multi-country study under the general editorial leadership of Jagdish Bhagwati and Anne Krueger, financed by USAID, which studies the inter-relations of exchange control, foreign trade regulations, and economic development. The frequently negative contributions of policies relating to money and finance have received increased attention in recent years. See Ronald McKinnon, *Money and Capital in Economic Development*, and Edward S. Shaw, *Financial Deepening in Economic Development*. The economic implications of the political culture created by inefficient pricing and distribution policies is the subject of Anne Krueger's article, "The Political Economy of the Rent-Seeking Society." (See the end of this paper for full references.)

⁵Given the limits on available resources, many countries will be able to reach the third objective only partly in the short term, even with external food aid.

controls actually do increase those groups' standard of living compared to what it might be under other policies. In any case, the objective of subsidizing the consumption of these particular groups at the expense of the rest of the population may legitimately be questioned by a donor when foreign assistance is used. Another example is a policy of prohibiting crossborder trade in food in order to achieve food self-sufficiency. Such "self-sufficiency" may turn out to imply *greater* scarcity and insecurity in the supply of food than if the economy used trade cautiously but more efficiently. Therefore, the objective itself could be defined more carefully, and policies adjusted accordingly.

The following sections will expand on the problems of existing food policies in developing countries and on the policy reforms that USAID supports.

2. Targeting Net Benefits from Consumer Food Subsidies

Urban food consumers in LDCs often constitute a relatively large, concentrated and politically vocal and influential group. A natural goal of most LDC governments is to support urban food-consumers' desires for a higher standard of living. However, attempts to use price controls and subsidies to lower the cost of food to such large portions of the market for food as the main urban groups can be largely self-defeating. The cost of food can be shifted away from the urban consumer only to a limited extent before the burden imposed on domestic agriculture or on the foreign exchange budget (including foreign aid) seriously impairs the supply of food (and other goods) to the urban population.

Past this point, the cost of a large subsidy to the broad urban population will largely be borne by the urban population itself in various ways: increased direct taxes, higher prices of non-food items as a result of higher taxation, higher prices as a result of inflationary finance, the opportunity costs of the diversion of governmental resources (including foreign aid) from programs that would have benefited the urban areas, and the inconvenience and possible deprivation resulting from food shortages and rationing (due to both over-expanded demand and production disincentives posed by reducing the returns to producers). Thus, the urban population's net benefit from broad subsidization of food consumption may well be substantially less than the reduction in their nominal expenditure on the controlled food items. Over the long term, when inefficiencies introduced into the structure of production as a result of price controls and subsidies have had their adverse effects on overall economic growth, this net benefit and its political dividends may well become negative.

Even in a broad program, there may still be sub-groups within the urban population for whom the net benefits are a substantial increase in income. However, the small group that escapes the costs of a broad food distribution program could as easily be a relatively well-off group as it could be a group with special nutritional needs. Furthermore, any such result would come about largely by chance. In order for a program to provide beneficiaries with an assurance of positive net benefits, the program would best be targeted to a relatively small group. In such a targeted program, benefits would be concentrated on a small and needy group while total costs would be relatively small and spread relatively widely.

Therefore, the objective of USAID policy is to employ food and other assistance resources to support food-distribution programs that are effectively targeted to small portions of the population with special and substantial unmet nutritional needs.⁶ USAID Missions should attempt to orient assistance in this

⁶Methods of targeting food programs to undernourished groups are discussed in USAID's "Nutrition" Policy Paper, May 1982. They are also discussed in the USAID Policy Discussion Paper, "Food Aid and Development," July 1981. Administrative problems of targeted food programs will be dealt with further in a proposed review of Tide II programs.

direction as far as possible. Any support from USAID to broad and untargeted food subsidization programs should be justified by a careful analysis of benefits and costs actually accruing to a specific group with unmet nutritional needs, since the effects on nutritional status cannot otherwise be assured.

3. Price Control on Consumption

In the long term, a basic goal of USAID's assistance is to enable the poor majority in developing countries to afford a more adequate diet. Generally, the most effective method of doing this is to increase the productivity and employment of the poor in agriculture (and other industries). This increases both the supply of food and the effective demand by the poor for food, with no need for price control. Efficient pricing is a useful instrument in increasing productivity and employment.

An objective of USAID food and agricultural development policy, therefore, is to encourage host governments to minimize direct manipulation of the market food prices paid by consumers. Because food markets when unregulated can generally be relatively competitive, market prices can be used to guide consumers to the lowest-cost sources of food.⁷ In contrast, an arbitrary reduction of the price of a specific food commodity will stimulate demand for that particular type of food. To meet that demand, resources must be shifted into production or import of that food and away from lower-cost substitutes. Given the limited supply of resources (as well as the limited availability of foreign aid), the results are reduced availability and higher costs of food in the aggregate.

Furthermore, programs of subsidized food distribution supported by USAID should minimize interference in pricing. Where it is administratively possible and economical to subsidize undernourished groups through cash grants or distribution of parallel monies such as food stamps, allowing the beneficiaries to purchase their own additional food from existing private-sector markets at unregulated prices, this mechanism should be preferred. If this is not possible and some degree of price control on sales to the target group must be used instead, the degree of control should be minimized:

by controlling the price of only a limited portion of the food bought by each member of the target group (if administratively feasible), so that the beneficiaries will have more purchasing power but at the same time will be guided by market prices to choose truly economical combinations of different foods for their diets; and

by leaving the remainder of the food market free of price control.⁸

⁷Promoting efficiency in food markets is briefly discussed below.

⁸To give a hypothetical, numerical example of this approach, suppose that the average household in the target group buys twelve kilos of some grain a week at a price of three rupees each in an uncontrolled market (at a total expenditure of thirty-six rupees), and that the program goal is to raise purchasing power over this grain by eight rupees. This could be accomplished by instituting price control and setting the controlled price at two-and-half rupees, on the assumption that the typical response would be to expand consumption (given the lower price) by four kilos to sixteen a week, as a half-rupee saving on each of sixteen kilos amounts to eight rupees. This plausible consumer behavior would result in a new total expenditure of forty rupees on this grain, implying that four rupees of expenditure on other goods (including other foods) has been diverted to purchases of this particular grain because of its relative (but artificial) cheapness.

This bias in demand, with its attendant excess cost of supply (if indeed such an adjustment in supply is possible), can be avoided and the same eight rupees' benefit extended if the policy were instead to reduce the price of *just the first eight kilos* bought by each household weekly to two rupees each, leaving the ninth and further units to be bought at uncontrolled prices. Since the price of extra kilos of this grain (beyond the twelve kilos bought without the price reduction) is not artificially depressed by this alternative policy, no bin in demand would be created. A plausible

4. *Producer Price Policies*

A variety of considerations may prompt the government to intervene in the private process of setting farmgate prices for foodstuffs by fixing prices at artificially high or low levels. Among them are:

the need to finance some of the cost of consumer subsidies at the farmers' expense by procuring supplies at reduced farmgate prices;

the desire to raise the incomes of the farm sector or of certain farm groups (especially where farmers have organized and become politically active);

the desire to increase national output of foodstuffs either to raise national income or to achieve food security through greater self-sufficiency; and

the desire to reduce the risk faced by farmers by reducing the fluctuations of prices around their long-term trends.

A.I. D.'s basic goal, broadly-based economic growth, is not consistent with the use of inefficient price controls to pursue either of the first two goals for changing the distribution of income. Economic growth can best be encouraged by using the price system to allocate productive resources efficiently, instead. Where changes in income distribution are desired, they should be pursued in ways other than price control. When an inefficient policy is the source of low income in one sector, the preferred course is to reform that policy, rather than to attempt to offset its effects with another inefficient intervention that would only tend to depress overall national income further. USAID Missions should, therefore, work to avoid a multiplication of inefficient controls, in which each control is adopted to offset the effects that the others have on income distribution.

Both the latter two goals of producer price-policy, briefly stated as stability and security, are ultimately related to increased food production and farm income. There is a perception shared by farmers and governments, both in LDCs and elsewhere, that the process of private trade and price-formation does not serve these goals adequately. However, the range of governmental interventions that has resulted includes some rather extreme measures, such as uniform administered pricing ("pan-territorial pricing") and nationalization of the grain trade. More moderate alternative policies sometimes chosen include limited governmental purchases at support prices and restrictions on inter-regional or international trade in food.

Two underlying conditions affecting agriculture support the perception that private trade and price-formation are faulty. First, fluctuations in available agricultural output induced by natural causes (such as weather, seasonality of production, and wastage) interact with relatively stable demand to cause greater year-to-year and intra-year fluctuations in agricultural prices than there are in the prices of things that farmers buy. Second, agricultural production is more diffused (over large numbers of farms) than is

consumer response would be to increase consumption of this particular grain by only two kilos to fourteen a week, at a total expenditure now of only thirty-four rupees (eight times two plus six times three, assuming the change in the uncontrolled price to be negligible). Thus, the benefit of eight rupees would be (efficiently) distributed over not just this particular grain but also, to the extent of two rupees out of the initial thirty-six, to other goods as well (including other foods), depending upon the true costs of the various goods.

production in other industries and, more to the point, than is the food trading sector. Individual farmers, therefore, face an economically exceptional set of marketing problems and at the same time are relatively disadvantaged in dealing with these problems organizationally.

When private trade is competitive, however, there are strong tendencies for the process of priceformation to address the farmers' problems. First, under competition a firm's survival and profits depend on keeping costs as low as or lower than those of other firms. As a result, the secular level of farmgate prices will be held as high as is permitted by the underlying consumer demand for food. Second, price differentials across space and (though difficult to predict) across time are powerful inducements to "buy low and sell high", and thus to reduce any price differential, such as a seasonal differential, that is not already smaller than "carrying costs" (transportation, storage, interest, and so forth.)⁹

In theory, because small-scale traders can be cost-competitive, the food-trading sector has the structural capacity to be highly competitive. In fact, competition in this industry is common and the results of competition between even a relatively small number of traders compare quite closely with the theoretically expected results given large numbers of traders. Where competition is lacking, the underlying ability of small- to medium-scale traders to operate cost-competitively should allow the government to promote it. (Too often governmental controls only confer privileges that, intentionally in some cases, reduce rather than enhance competition.)

The government should promote competition in the food-trading sector in various ways: by reducing regulation in some instances, by standardization of measures and quality designations, and by providing infrastructural inputs like transportation and communication systems where they are not adequately provided privately, for example. USAID can support this effort especially through training and technical assistance to the trading sector.

For the government to go further than these (already formidable) measures would expose it and the economy to the risk of excessive costs and inefficiencies that may be directly counterproductive to the goals of increased stability, security, and output. Pan-territorial pricing, for example, is likely to raise the aggregate cost of food production by eliminating the competitive disadvantage of distant regions that would otherwise be subject to price-discounts to offset transportation cost differentials (and equally by eliminating the price-premium incentive to the more favorably situated farms).

More commonly advocated on the basis of experience in the U.S. is a system of limited governmental purchases at pre-announced support prices. Such a system can be organized in a variety of ways, and may be designed to confine price variations within a narrower range or to raise the average price. The difficulty with governmental attempts to narrow price variations is that, unless the government is a better predictor of future prices than are farmers and private traders, the government's effort will be unprofitable and thus expensive and, more importantly, will exacerbate rather than reduce fluctuations in prices over the course of procurement and disposal of stocks.

⁹ It is possible for private traders to exacerbate price instability by driving prices up untenably high through purchasing for inventory, and then driving prices down when the inventory is marketed. However, although this is possible, it is not profitable. Private firms that tend to buy high and sell low (and there have been many of them) are short-lived and not representative of the bulk of the food trade, which is profitable and survives.

One problem with raising average farmgate prices of food is that increased food output may come at the expense of output of exportable cash crops. Another difficulty with raising the secular price level is that it ignores the effective level of demand and leaves the government holding stocks of food, which can be extremely costly. The U.S. Government's solution to this problem has been to bear this cost out of its huge income and to become a major food donor both domestically and overseas. This is not, however, a practical option for governments in LDCs, which are often recipients of food aid rather than donors.

Nonetheless, a government might decide to accumulate a certain amount of food, both in order to support farm prices and incomes at certain times and to guard against the simultaneous incidence of a poor harvest and scarcity of both imports and food aid. Complex issues arise, however, regarding the cost of such reserves compared to those of alternatives such as financial reserves and international programs such as the cereal import facility operated by the IMF. Governmental food reserves are not necessarily the best alternative.¹⁰

B. Agricultural Inputs

As part of overall food and agriculture policy, many LDC governments have promulgated economy-wide price controls on agricultural inputs such as fertilizers. The intended purposes of these controls are:

To compensate farmers for income lost due to price controls or taxation in markets for agricultural outputs;

To popularize the use of new inputs in order to increase productivity; and

To lower the cost of production of food in order to lower the cost of food to consumers.

In addition, the input distribution system is frequently regulated or operated by the public sector. Part of the purpose of governmental distribution control is to ensure that benefits from price controls (calculated before taking the controls' fiscal burden into account) are distributed to the intended beneficiaries (eg., small farmers), and that inputs are not diverted from intended users through the black market. Producers and distributors of agricultural inputs are subsidized to permit sale to farmers at prices set below costs. Although some farmers may benefit from controlled prices, the subsidies are usually not paid directly to the farmers themselves.

It is USAID policy to encourage the freeing of both agricultural output and input prices, so that output prices compensate farmers adequately without artificial reduction of input prices, and so that input prices are sufficient to support development of an effective input supply system.

With regard to inputs supplied to farmers by USAID-supported agricultural projects, it is frequently proposed that the project subsidize the inputs that farmers would not initially be willing to buy at full cost.

It is USAID policy that such subsidies under USAID-supported projects be offered only under certain conditions, which are specified below.

¹⁰Food security itself is a complex matter which will be dealt with in a future USAID policy paper.

These policies are elaborated in the following sections.

1. *Income Compensation*

Economy-wide price and distribution controls achieve at best only partly the objective of income compensation for farmers, and even then only for some farmers. Farmers will receive benefits proportional to the amount of inputs they buy at controlled prices. This gross benefit is therefore larger for larger farmers and for farmers who use advanced techniques requiring relatively large amounts of cash inputs. Farmers who use relatively few cash inputs because they have little land, because they are not technically advanced, or because they are not favored by the controlled distribution system will receive little benefit if any.

Against this gross benefit must be set the costs that farmers bear as a result of price and distribution controls on inputs. Since only part of the cost of production and distribution of inputs is usually covered by controlled prices, the remainder must be financed by the government's subsidies. The source of funds for these subsidies depends on the methods of governmental finance.¹¹ Greater taxation could directly lower some farmers' after-tax income, and inflationary finance through expanding the availability of credit in the aggregate could reduce farmers' real income by raising the cost of things they buy. Governments are also tempted to lower official procurement prices of farm products when under fiscal stress, so that some of farmers' losses of income from depressed *output* prices can be attributed directly to the fiscal costs of subsidies to suppliers of agricultural *inputs*. An input program's net impact also depends on which alternative programs (such as tax reduction or infrastructural investment) the government would undertake if it reduced expenditures related to agricultural input controls.

In addition, to the extent that price and distribution controls on agricultural inputs do not fully compensate input producers and distributors, the amount of inputs available will tend to decline, reducing the profits of those farmers thus excluded from access to inputs. Furthermore, blackmarketing may deprive farmers of the benefit from reduced input prices.¹²

As a result of these costs, the *net* benefit from price and distribution controls will clearly be negative or zero for most farmers who use little or no controlled inputs. Farmers who use controlled inputs intensively and who are privileged to buy them directly at controlled prices are the group most likely to receive a positive net benefit from controls on *inputs*. This benefit will tend to offset losses from controls on *output* prices, but even for these farmers the offset is unlikely to be complete.

In fact, reductions in input prices must be proportionally much larger than reductions in output prices before a net benefit is realized by the farmer from the overall set of controls.¹³

¹¹Use of counterpart funds generated by foreign aid to finance the local costs of such a subsidy generally only diverts those funds from uses such as other agricultural program, and thus ultimately has opportunity costs for farmers as large as or larger than other means of finance.

¹²All these offsetting costs to farmers as a result of input controls are analogous to offsetting costs consumers bear as a result of food price controls, some of which were discussed in the previous section.

¹³For example, assume that (1) the free-market cost of cash inputs is one-third of the free-market value of the entire crop, (2)

Finally, to the extent that the farm sector as a whole is compensated (even though some farmers gain and some farmers lose), the net benefit of the non-farm sectors (who are by definition net consumers of food) is reduced from what it would be otherwise, because they are the ultimate source of any compensation for farmers. Complete compensation of the farm sector means that consumers as a group would receive *no* net benefits from the package of price controls, thus obviating the original rationale of the whole program. In fact, the process of shuffling and re-shuffling costs and benefits introduces administrative costs and inefficient distortions which create an overall net loss for the economy.

Therefore, it is USAID policy to support the decontrol of output prices, thereby eliminating the need for compensation of farmers, rather than to compound the inefficiency of the intervention in output markets by adding other interventions in the input markets.

2. *Popularizing New Inputs*

The second and third purposes of input controls, raising food output and lowering food prices by lowering costs of food production, may be taken together because they both depend on expanding the use of inputs and thus on expanding the supply of inputs. The relation between pricing policy and input supply can be examined in two different contexts: (a) distribution of inputs within agricultural projects, and (b) economy-wide price control. The difference between these two contexts is that input supply may be assured in a project, but is generally not assured by economy-wide price control.

a. *Pricing Inputs within Agricultural Projects*

In order to provide farmers knowledge and experience with new techniques, many projects must induce farmers to use new inputs. Initially, farmers may not be willing to buy these new inputs at market prices that cover the inputs' full costs. One approach to developing farmers' demand for new inputs is to distribute pre-arranged supplies of the inputs directly to farmers at whatever prices the farmers are initially willing to pay, or even for free. If this approach is followed, the project will either have to buy the inputs itself or it will have to subsidize the input distribution system.

This approach can be consistent with USAID policy, even though it may involve an element of subsidization, providing it meets the following tests.

Prices to farmers should be no lower than is required to induce their participation. The purpose of these projects is to increase farmers' productivity and income in the long term by increasing the farmers' knowledge and skills, not to increase farmers' consumption in the short term by underpricing

one-half of the entire crop is marketed, and (3) **one-half** of the fiscal burden of the subsidies paid to producers and distributors of the inputs is ultimately borne by **the farmer**. Then a *sixty* percent reduction in the total cost of controlled inputs is required to offset entirely a *twenty* percent reduction in the price of farmers outputs, assuming no change in marketing or input use.

Numerically, if the crop is worth \$600, so that the marketed half is worth \$300, then a twenty percent reduction in output price will reduce cash income by \$60. If the controlled inputs' free-market cost is one-third of \$600, that is, \$200, then a sixty percent reduction in price would save the farmer \$120. Consistent with assumption #3, however, half of that \$120 is lost to higher taxation and higher prices of other goods the farmer buys due to such factors as, for example, excise taxes and inflation required to finance the input subsidy. Then Iowa leave a net gain from *input* control of \$60, which merely offsets the loss from *output* control.

inputs that they would willingly have bought at higher prices.

Prices to farmers should rise in steps during the project as the farmers' willingness to pay is increased by learning about the inputs. (This is especially important where the life of the project is several years or longer, and where there is a significant gap between the initial price and the suppliers' costs.) Before completion of the project, prices should be at the levels that would be charged by efficient, competitive, private input suppliers.

After completion of the project, the input supply system should be able to supply farmers' demands dependably. This implies that the system not be dependent upon fiscal subsidies, but instead that it be self-sustaining on the basis of full-cost pricing.

The use of inputs should be economically justified. A cost-benefit analysis should be done to show that the benefits from increased use of inputs exceed the full costs of inputs (not just that portion of costs paid by farmers).

Subsidization should be cost-effective compared to other methods of assuring farmers that they will suffer no loss from participation. If, for example, an insurance scheme that guarantees a certain minimum income for the (temporary) duration of the project can generate the same participation and learning at a lower cost to the project than subsidizing input distribution, then such a scheme is more cost-effective than input subsidization. put subsidization.

A key problem likely to be encountered in using input subsidies within agricultural projects is that it may be difficult to prevent a temporary, project-related subsidy from becoming a permanent, economy-wide policy of price control. As elaborated below, economy-wide price controls, even if compensated by subsidies, tend to reduce the effectiveness of the input supply system (thus violating the third requirement above). In some cases, it may be necessary to find a method other than subsidizing inputs (such as insurance schemes, as in the fifth requirement above) to carry on projects without risking damage to the input supply system. If the input supply system is already unable to function adequately because of controls, it may in some cases be prudent to delay implementing agricultural projects whose long-term benefits depend on input supplies, until policy is changed to permit the supply system to function adequately.

b. Economy-Wide Price Control

Superficially, lower input prices mean lower costs of production and thus lower prices to consumers. However, without the increased productivity that stems from increased use of inputs, these connections do not hold. The true costs of production are the alternative goods that resources could have produced had they not been used for agricultural inputs. Price control and subsidization by themselves do not lower these costs; they merely shift the costs' financial burden onto the fiscal system, and ultimately back onto the public. The public as a whole, therefore, ends up no wealthier and no better able to afford food as a result of price control.¹⁴

¹⁴As suggested above, although increased productivity and food supplies will lower consumer prices over time without price control, artificial price reductions may stimulate purchases of a specific good beyond the level that is most efficient, given national income.

Economy-wide price control and subsidization can, however, severely handicap the input production and distribution systems, because subsidization is a poor substitute for the sales revenues lost due to price control. The fiscal process is affected by a variety of influences that may conflict with the financial needs of the input supply system, and it generally has a poor record of delivering subsidies at the times needed to serve the very time-bound agricultural sector. In some cases, the government may allocate funds only after a financial crisis has arisen in the input supply sector. Furthermore, subsidies may not give suppliers appropriate incentives, especially if they are allocated according to suppliers' financial losses. Indeed, such subsidies may create perverse incentives to relax efforts to minimize costs. In contrast, dependence upon sales revenues gives suppliers the incentive to improve their performance, without encouraging excessive costs.

Price control's effects on both the supply system's financial strength and its incentives may well result in reduction in the overall supply of agricultural inputs.

On the other hand, *if* the government makes inputs available to the full extent of demand generated by very low prices (which are sometimes only twenty percent of cost), the result will be over-use of inputs, which implies higher real costs of supplying food.¹⁵

Therefore, USAID Missions should encourage governments not to disguise the true costs of agricultural inputs through economy-wide price control. Instead, governments should permit the national input-supply system to be efficiently financed through the system's own sales revenues rather than forcing it to depend on unreliable fiscal subsidies.

3. *Excess Demand and Allocation Problems*

Price control creates excess demand, which in turn creates serious problems in allocating agricultural inputs. Any buyer who pays the controlled price for an input can profit, whether he or she is a farmer or not, by re-selling the input (given a little ingenuity and assuming that the transaction cost of re-marketing does not exceed the difference between the market-clearing price and the controlled price). Indeed, price-control creates an artificial scarcity in which buyers are often able to re-sell inputs at prices higher than the market-clearing price. As a rule, the benefit of lower-priced agricultural inputs accrues to their *buyers* and not necessarily to their users, who may be different groups of people.

Given that resale cannot effectively be eliminated, the government is usually forced to control the distribution of inputs in order to provide the benefits of price control to the target groups. However, even a well motivated rationing authority faces a delicate problem of to whom among the excessive number of legitimate demanders in the target groups to allocate the available inputs. No choice open to the rationing authority delivers inputs to productive users and benefits to target groups better than would be done by a combination of direct income subsidization of target groups, a free market in inputs, and provision of

¹⁵For example, fertilizer that is imported for \$100 and sold to a farmer for \$20 would willingly be used if it produced \$40 worth of additional crops, assuming that a two-to-one ratio (*ie.*, \$40/\$20) adequately compensates the farmer for additional costs and risk and thus raises net profits (and the farmer's welfare). But, even if cif import prices of food are twice domestic prices, it would still cost only \$60 to import the same amount of food. On this assumption, the real cost of this food would be 25% higher than if imported directly (\$100 compared to \$80). Furthermore, food produced with imported fertilizer is no more secure from the risks of foreign trade than is food directly imported.

information and technical assistance to the inputs' prospective buyers.

Moreover, the whole process of rationing diverts personnel from other tasks that are necessary to assuring timely delivery and other services that real users of the inputs need. Indeed, excess demand for inputs sometimes has the result that the inputs are delivered without needed services or even in an adulterated form. When the distribution system is licensed and regulated, as is frequently the case under price controls, there is no scope for competition to force suppliers to provide retail services or to maintain product quality. In the extreme, the controlled supply system may adjust quality in such a way that what many farmers get is worth no more than the controlled price they pay. Alternatively, supplies may be allocated through bribery, which also deprives intended beneficiaries of some of their benefits (besides having deleterious effects on administration and politics).

Therefore, it is USAID policy to encourage host governments to dismantle price and distribution controls on agricultural inputs. USAID Missions should support alternative policies that help to develop and to support a competitive private input distribution system that relies on market mechanisms to allocate inputs efficiently and to maintain inputs' quality while providing timely delivery and needed services to farmers.

C. Finance¹⁶

1. The Role of Financial Services

The basic role of financial institutions is to lower the transaction costs of matching savings with investments. Aside from the direct cost-savings, this increased efficiency induces an increased flow of funds from savers to borrowers. The value of the financial transactions thus brought about is the increased productivity with which real resources are used when they are bought by borrowers of funds instead of by depositors of funds. Some of this benefit accrues to borrowers, whose rate of return on the real resources they buy with borrowed funds is higher than the rate of interest they pay on those funds. Some of the benefit accrues to depositors, whose rate of return on the real resources they would have bought would have been less than the rate of interest they receive on their deposits. The remainder of the benefit accrues to financiers themselves, from the difference between the rates of interest on loans and deposits (the "spread"), less operating costs.

Some credit projects underemphasize this role of financial institutions. Just as in some circumstances a simple, massive transfer of food into a country can reduce farmers' incentive and financial ability to produce food, simple massive transfers of credit by a project can reduce the incentive and ability of financial institutions to "produce" financial resources by mobilizing and aggregating the savings of individuals. This is illustrated by the example of a project that used national and local financial institutions to provide agricultural inputs and capital goods to farmers. The project's evaluation calculated that additional crop production net of additional input use yielded a relatively high rate of return on the agricultural investments financed under the project. On this basis the evaluation concluded that the credit project was successful. Yet, the evaluation provided no evidence that the project had improved capabilities of the financial institutions to mobilize or to allocate indigenous financial

¹⁶This section draws on extensive research on finance and credit policies in developing countries, including papers prepared for the USAID Spring Review of Small Farmer Credit and subsequent work at Ohio State University and elsewhere. USAID's policy in this area will be stated more fully in the forthcoming USAID Policy Paper, "Financial and Capital Market Development."

resources. On the contrary, the evaluation documented the fact that external concessional resources were in part merely substituted for indigenous funds that the institutions had previously used. Therefore, the project did little to develop the ability of the financial system to sustain agricultural investment independently of outside assistance. Indeed, from the point of view of *financial* development the project may have been counterproductive.

2. Financial Policy

USAID's primary purpose in the area of credit and finance should be to create and to support a system of financial institutions that effectively mobilizes and allocates private indigenous financial resources. The financial system should be encouraged to mobilize as much savings as the economy's borrowers are willing and able to pay for. Financial institutions should, therefore, be free to set interest rates for loans and deposits high enough to clear the market between borrowers and savers. De-control of interest rates would also allow a spread between deposit and lending interest rates sufficient to make financial institutions self-sustaining and to eliminate the need for subsidies.

Furthermore, de-control of interest rates would eliminate a variety of other ill effects, such as the following.

Reduced interest rates on loans benefit larger and better-off borrowers in proportion to the amount they borrow. Larger borrowers also stand to gain more by defaulting. (The ultimate effect on the distribution of wealth depends not only upon who receives the loans and who defaults, but also upon who bears the costs of defaults and reduced rates of interest: *eg.*, savers and taxpayers.)

Since interest is generally a small portion of cash costs in agriculture, reduced interest rates on loans seldom reduce production costs enough to have a substantial impact on a farmer's decision to adopt a novel or risky technique.¹⁷ On the contrary, evidence shows that even small farmers are willing to borrow at substantial rates of interest to make investments in proven and profitable new techniques, provided that credit and repayment are conveniently scheduled. Since interest-rate controls tend to suppress financial intermediation and the supply of credit, such controls actually tend to reduce adoption of those new techniques that require additional credit.

Interest-rate controls hide the fluctuations of market-clearing interest rates and thus obscure the true scarcity of credit in the economy.

Interest-rate controls are sometimes adopted in connection with targeted credit allocation programs. Aside from the point noted above that reduced interest rates are seldom necessary to induce target groups to borrow, the control over credit allocation itself has adverse effects, such as the following.

Governmentally mandated loans often burden financial institutions with both increased administrative costs and reduced loan recoveries. Administrative costs of mandated loans may be higher than those of normal commercial loans when, as is often the case, a set of borrowers (*e.g.*, small farmers) is

¹⁷If an expensive, long-lasting capital good is a major part of the technical package, interest will be a larger portion of production costs, and reductions of interest rates will have proportionally more importance. Such investments are, however, rare for small farmers in LDCs.

specified with which the institution is (at least initially) ill equipped to deal. Loan recoveries may decrease for two reasons: (a) credit is pushed into riskier areas where borrowers are more often unable to repay; and (b) targeted borrowers may be less inclined to repay their loans. They may feel that the loan is essentially a governmental grant or that the financial institution will be unable to enforce any penalty, such as withholding credit in the future.

To reduce costs in the face of these problems, financial institutions frequently have to cut back their levels of service, especially to smaller borrowers who are more expensive to deal with per dollar lent. As a result, small borrowers find that transaction costs such as travel, time spent waiting, and fees, rise to offset much or all of the expected savings from low interest rates.

As the combined result of low deposits, excess demand for cheap loans with the potential for default, and increased administrative costs, financial institutions frequently become inclined to ration credit according to personal political influence and administrative convenience, rather than according to the borrower's productivity or need. Small farmers and other small businesses are likely to be discriminated against in the competition for loans under these circumstances, even though lending to them is mandated.

USAID Missions therefore should support elimination of controls on interest rates, so that rates will be set at market-clearing levels through financial intermediation, rather than at arbitrary levels by governmental controls. Both loans to final borrowers and the funds provided by host governments to financial institutions for on-lending under USAID-supported projects should bear rates of interest that are comparable to market-clearing rates of interest for non-concessional sources of funds. Some of the interest yield to the government under such programs could be set aside for technical assistance to the financial institutions or to the sub-borrowers for facilitating the credit transactions. (The same result could be achieved by requiring the financial institutions themselves to set aside from the market interest payment, all of which would otherwise go to the government, a portion reserved for specified purposes of institutional development or services to sub-borrowers. However, the interest payment to the government should not be reduced simply as an unbudgeted subsidy to the financial institution.) Otherwise, technical improvements to financial institutions can be funded by grants or loans that are budgeted separately from the funds made available for on lending. This latter method may be preferred if it is desired that the institution-building activities should proceed before the on-lending activities can generate revenues.

Missions should also endeavor to assist financial institutions by finding innovative, cost-effective methods by which they can eventually serve target groups on a self-sustaining basis. Alternative pilot approaches may be supported through training, technical assistance, and modest financial assistance. Such efforts should examine a range of policies and characteristics of credit programs and practices that input upon target groups such as small farmers (e.g., traditional collateral requirements).

Where it is not possible to persuade a government to eliminate interest rate controls or credit rationing in one step, Missions may provide support to or through financial institutions on the basis of significant measures being undertaken by the government to reduce controls where they adversely affect the mobilization or allocation of credit.

However, the importance of interest rates should not be overlooked even in the short to medium term. A credit fund that prices its loans only five percentage points below the rate of inflation and that sustains

only a nine percent default rate on principal will still shrink to one-half its initial purchasing power by the end of a five-year project (if the whole fund is continuously loaned out).

IV. Implementation

USAID's policy regarding pricing and distribution policies related to food and agriculture has implications for two aspects of USAID's programs:

analysis and formulation of recommended economy-wide policies for consideration by host governments; and

pricing and distribution components of USAID-supported projects.

Two projects coordinated by the Science and Technology Bureau (S&T) will facilitate Missions' access to technical assistance in analysis and design of policy-related programs. An "Agricultural Policy Analysis" project is being designed both to assist Missions in policy analysis and to assist the development of better policymaking institutions in host governments.¹⁸

The Rural Savings for Capital Mobilization Project, designed by S&T's Rural Institutions Divisions (S&T/MD/RI), will assist Missions in establishing, testing, and implementing improved approaches to rural savings and credit, as well as in performing, and in strengthening the capacity to perform, analysis of interest-rate and credit allocation policies, both in USAID Missions and in host governments.

In addition to support through these projects, a forthcoming USAID Policy Paper on "Approaches to the Policy Dialogue" will provide general advice and guidance to Missions on the conduct of discussions with host governments regarding economic policies.

In the area of pricing and distributional aspects of USAID-supported projects, the present paper contains general guidance as to the goals that Missions should pursue. Implementation may require some Missions to increase their access to expertise in analysis of economic policies. Missions may wish to consider increasing the number of their personnel positions in such designations as "Program Economist" and "Agricultural Economist". USAID has recently emphasized recruitment of economists and agricultural economists for its Foreign Service, as well as under joint Career Corps appointments, which should allow more Missions to fill such positions with the appropriate skills.

Project design in the areas of concern of the present paper will also be assisted by the forthcoming evaluations of project's in the Agricultural Services Sector, to be conducted by USAID's Evaluations Office (PPC/E). This series of evaluations will investigate the effectiveness and sustainability of agricultural development programs in the provision of inputs, equipment, and credit, and in improving marketing channels for crops.

¹⁸Of related interest is the "Evaluation of Agricultural Sector Planning Activities in Latin America and the Caribbean,, July 1982, commissioned by the Latin America Bureau's Rural Development Division (LAC/DR/ARD) to review the results of USAID-supported projects in that region.

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*This list simply provides more complete references to documents cited in the paper. It is not intended to be an exhaustive list of the important literature dealing with pricing and related policy issues in food and agricultural development.