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**TARGETED CONSUMER FOOD SUBSIDIES AND  
THE ROLE OF U.S. FOOD AID PROGRAMMING IN AFRICA:  
A WORKSHOP REPORT**

by

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# **TARGETED CONSUMER FOOD SUBSIDIES AND THE ROLE OF U.S. FOOD AID PROGRAMMING IN AFRICA: A WORKSHOP REPORT**

## **I. INTRODUCTION**

A one-day workshop entitled "Targeted Consumer Food Subsidy Schemes and the Role of U.S. Food Aid Programming in Africa" was held on November 21, 1989. The workshop was sponsored by the Office of Policy, Program, and Management, Bureau of Food for Peace and Voluntary Assistance of the Agency for International Development (AID/FVA/PPM). Thirty-seven participants from a variety of organizations and institutions attended.

The purpose of the workshop was to:

1. Review the experience of other institutions in targeting food assistance to low-income households.
2. Identify cost-effective approaches for targeting food subsidies to alleviate household-level food insecurity in sub-Saharan Africa.
3. Specify the appropriate role of food aid in targeted food subsidy schemes.

This summary is particularly directed to AID personnel, especially those in the Africa Bureau, the Food for Peace and Voluntary Assistance Bureau, and overseas missions, in the hope that the conclusions of the workshop will assist in the design and implementation of new targeting mechanisms. The report may also be useful in informing project planning and policy analysis by PVOs, host-country agencies, and research institutions.

The major conclusions of the workshop were:

1. Ensuring that low-income households have access to food requires targeted strategies; untargeted food subsidies are fiscally unsustainable and higher producer prices hurt net food buyers, at least in the short run.
2. Food aid, either in the form of commodities or local currencies generated from food aid sales, can be used to support self-targeted subsidy schemes as well as more traditional, administratively targeted food subsidy schemes.
3. Self-targeted consumer food subsidy schemes, because they work within the domestic market for food, offer a means for reaching the poorest households without disrupting the ability of the market to supply the rest of the population.
4. Self-targeted schemes are most likely to succeed under the following conditions: (a) there are significant differences in food preferences between the targeted poor households and wealthier households, (b) a commodity preferred by the poor is available for subsidy at central points in the marketing chain, (c) self-

targeting with a less preferred food is politically viable, and (d) the subsidized food is not purchased for use as animal feed.

5. Advertising and marketing schemes may provide a mechanism for modifying food preferences. Such schemes can stimulate demand for subsidized, less preferred foods among low-income population groups and/or deflect demand of wealthier groups away from self-targeted foods.
6. Innovative administrative schemes using local currencies generated from food aid sales, such as food or cash-for-work projects, seasonal price stabilization measures, and small enterprise development schemes, deserve further research and trial.

The primary findings are contained in the "Summary and Conclusions" in Part II. Abstracts of the presentations at the workshop are provided in Part IV.

# TARGETED CONSUMER FOOD SUBSIDIES AND THE ROLE OF U.S. FOOD AID PROGRAMMING IN AFRICA: A WORKSHOP REPORT

## II. SUMMARY AND CONCLUSIONS

### THE FOOD SECURITY CRISIS

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**Persistent and growing food security problems require household-level strategies.**

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During the 1980's, undernutrition arising from food insecurity has increased significantly in Africa, both in terms of the absolute number of people affected and as a percentage of the population, and is estimated to affect over 25 percent of the population (Pinstrup-Andersen, 1989). Food security is defined as "the ability of a country or region to assure, on a long-term basis, that its food system provides the total population access to a timely, reliable and nutritionally adequate supply of food" (Eicher and Staatz, 1986). Thus, the concept of food security involves more than supply at the national level and meeting food production goals. It also includes assuring individuals and households access to food supplies through generating effective demand via income growth or transfers (Weber et al., 1988).

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**There are limits to relying exclusively on producer price policies to solve the food security crisis in Africa.**

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In the early 1980's, it was often argued that food insecurity was primarily a symptom of discriminatory producer price policies that reduced incentives to produce for the market and that raising producer prices would provide farmers with the incentive to expand output. Yet recent research has demonstrated that there are severe limits to relying exclusively on producer price policies to solve the food security problem in Africa. In many countries, producer prices play a relatively small role in determining aggregate output, at least in the short run. More important are factors such as the efficiency of marketing arrangements and the effectiveness of government sponsored agricultural research, extension and credit services (Cleaver, 1985). Removing non-price constraints and raising producer prices are, in many instances, complementary actions which, taken together,

increase production much more than the combined effects of each policy taken separately.

Furthermore, since the bulk of the marketed surplus is produced by a small proportion of better-off farmers (even in countries where most farmers are classified as "smallholders"), most of the benefits of higher food prices would be captured by relatively few farmers. Finally, even in those countries where there is capacity to expand production in response to higher prices, such a strategy would severely hurt the large number of rural households that are net buyers of food (Weber et. al, 1988).

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**Long term solutions involve cost-reducing innovations in technology, policy and institutions.**

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**In the short run, better ways to assist at-risk households and individuals must be found.**

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Indeed, most developing countries face what Timmer, Falcon, and Pearson (1983) have termed the "food-price dilemma." That is, governments are caught between the need to offer producers remunerative prices and other essential services and the desire to assure both urban and rural consumers affordable food prices. Although some governments have attempted to escape the dilemma by subsidizing the difference between producer and consumer prices, current budgetary constraints and the fiscal requirements of such a policy may combine to make it an unsustainable option. A possible solution to the "food-price dilemma" lies in reducing the real cost of producing food through technological change in agriculture, marketing and processing, and in increasing non-farm sources of income so that consumers are able to purchase more food from the market. However, these are necessarily medium to long-term endeavors. In the meantime, attacking the food security problem means finding ways to reach the large number of rural and urban consumers who do not have enough resources to assure themselves or their children an adequate diet.

#### **TARGETING CONSUMER FOOD SUBSIDIES**

Generalized food subsidies have been the historical answer to the problem of assuring consumers reasonable food prices. General subsidies are designed to offer a staple grain or basic commodity basket at below-market prices. Such schemes

provide subsidized staples to households irrespective of income levels and thus are "untargeted." Therefore, general subsidies entail significant fiscal costs, and with many African nations experiencing an overall deterioration in budgetary resources, general subsidies have become unsustainable. Although general subsidy programs have been effective in reducing poverty and improving the nutritional status of the poor, as Pinstруп-Andersen (1988) has pointed out, they are not the most cost-effective means of doing so.

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**It is widely acknowledged that generalized subsidies are financially unsustainable in most African nations.**

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Thus the dilemma is how to target food subsidies so as to address the nutritional needs of the food insecure in a manner that is financially sustainable and does not undermine the chances for assuring improvements in food security (both on the supply and access fronts) over the long term. For example, research has demonstrated the importance of well-functioning product and factor markets in helping assure the food security of many rural households. The challenge is to design programs that reach poor households which lack adequate income to purchase enough food from the market, yet do not disrupt the ability of the market to supply the rest of the population.

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**Targeting food subsidies entails tradeoffs between program coverage, cost, and leakage.**

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Targeting food subsidies entails a number of trade-offs. By excluding some portion of non-needy households, targeting improves the cost-effectiveness of the scheme since the degree of "leakage" is reduced, ideally without sacrificing coverage to the needy groups. However, the administrative costs of targeting increase as the targeting effort intensifies to further reduce leakages. At some point, the increased administrative costs are greater than the cost savings from reducing benefit leakage to non-needy households (Pinstруп-Andersen and Alderman).

#### *Administrative targeting*

There are numerous options for administering targeted subsidy schemes: eligibility for program participation can be based upon household income, asset ownership, nutritional status of household members, occupation, household composition or geographic area. For example, households with



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**In many African countries, there are few options for administering subsidy schemes that target households.**

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**There may be ways to use local institutions to target food more effectively within communities.**

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incomes below a certain threshold or households with members determined to be at nutritional risk can be identified and given access to subsidized commodities through food stamps, fair price shops or some other mechanism.

Targeting is an appropriate strategy only when the food insecure are a relatively small proportion of the population. If most of the population is food-insecure, there are few savings possible through targeting. Yet identifying vulnerable households involves obtaining significant data on the economic or nutritional status of individual households as well as the administrative capacity to carry out the scheme. There is general consensus that many, if not most, African countries lack these prerequisites for the effective information collection and administrative targeting of food subsidies.

Given the limitations of administratively targeting individual households, there still may be potential for disaggregated local-level targeting of subsidized food at the village or neighborhood level. Ideally, a surveillance system would be in place to ascertain when a deterioration in consumption levels or food price increases create the need for intervention. Distribution channels may include PVO's, women's groups, or farmer cooperative organizations.

However, such distribution may only be a limited solution, suited more to disaster-type circumstances. In the long term, there may be problems in assuring the objectivity of a local monitoring system which can trigger the distribution of subsidized food in the community. Also, such an option would have to be carefully designed so as not to reduce incentives to local storage or production.

Additional problems can arise if the subsidized food becomes "too cheap" relative to other sources of animal feed. In this event, subsidized foods may go to animals rather than humans. Subsidized grains may also be diverted to making alcoholic beverages.

## SELF-TARGETING SUBSIDY SCHEMES

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**Self-targeting mechanisms offer hope for reaching vulnerable households.**

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Given the limitations of administratively targeted schemes in Africa, there has been a surge in interest in "self-targeting" mechanisms. Indeed, self-targeting offers the hope of reaching the food insecure with minimal leakage and without complicated administrative requirements. A self-targeting food is a "less preferred staple" that is consumed primarily or exclusively by the poor.

In the lexicon of economists, a self-targeting food is an "inferior" food in that it has a negative income elasticity of demand. That is, as incomes rise, consumers chose to consume less of these foods. Thus, self-targeting schemes have the potential to be very cost-effective: if "less preferred staples" such as millet and sorghum are subsidized, richer households will voluntarily exclude themselves from the program by choosing more preferred, unsubsidized staples such as wheat and rice.

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**Certain conditions must hold for self-targeting using "less preferred staples" to be an option.**

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Thus, for self-targeting to work, there has to be significant diversity in dietary patterns between the poor and the rich. Unfortunately, consumption studies suggest that for some countries, a "less preferred staple" does not exist. A 1988 study in urban Mali found that consumers across all income groups preferred a relatively constant proportion of rice and coarse grains (Rogers, 1989). Within the observed range of prices, consumers did not substitute coarse grains for rice very readily when rice prices rose or coarse grain prices fell. Rather, increased rice prices induced households to decrease consumption of both rice and coarse grains. The lack of substitutability is partly explained by the different roles of rice and coarse grains in the diet; rice is the preferred midday meal since it does not require the preparation time and fuel usage that coarse grains do.

Therefore, in addition to being primarily consumed by the poor, the self-targeted food must also exhibit an actual price differential when compared to other, more preferred grains. For example, while the retail price of rice may be significantly higher than that of coarse grains such as millet or sorghum, when the

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**Effective self-targeting schemes require a range of country-specific food consumption data.**

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**The food aid commodity mix may restrict the use of self-targeting schemes.**

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labor, milling, fuel and other preparation costs of coarse grains are factored in, the price differential may be much smaller or even nonexistent.

Identifying appropriate staples for self-targeting schemes is primarily a knowledge problem. It requires detailed information on the consumption patterns of the rural and urban poor, including price and income elasticities and relative contributions of various food to total dietary intake. Information is also needed as to the degree, location, and timing of the involvement of the poor in the market. Hence, self-targeting schemes require a firm base of country-specific prior research.

#### ***Food aid and "self-targeting"***

Even if a "less preferred staple" is identified, there must be some means of placing a subsidy on it. For imported commodities, especially those provided by food aid, this is fairly straightforward. It is more problematic for domestically produced goods, which may be produced and marketed in a very dispersed manner. If the commodity does not pass through some central point in the marketing chain, it may be very difficult administratively to subsidize. For example, certain varieties of roots and tubers may be self-targeting commodities in parts of Africa, yet subsidizing consumption of these foods requires the logistic complications of government purchase and re-sale.

For food aid programming, there is also the problem of matching identified self-targeting foods with the available food aid commodity mix. The particular mix of food aid commodities available in the United States is ultimately determined by domestic farm policy outcomes rather than the specific commodity needs of recipient nations. For example, U.S.-supplied wheat and rice are rarely, if ever, "less preferred staples" in West Africa.

Thus, there are three selection criteria for a self-targeting staple. First, it should be an economically "inferior good" in that it has a negative income elasticity of demand. Second, the food should have a relatively high intensity of consumption among

the target group. Third, the food should be inappropriate for use as animal feed, or there should be available means to prevent using the inferior subsidized food for animal feed (Yusef, 1989).

***Political limitations***

Finally, there is the issue of the political acceptability of self-targeting schemes. Governments often do not wish to publicize the fact that, by promoting a "less preferred staple" for lower-income groups, they are contributing to class distinctions in consumption patterns. Thus, self-targeting schemes may face the dilemma of trying to create an environment where upper-income consumers perceive significant differences between the "less preferred staple" and other staples, while at the same time avoiding the political ramifications of providing lower-income consumers with less preferred foods (Yusef, 1989).

Political constraints are often most severe in the poorest countries. When a great proportion of the population are poor, it becomes politically difficult to distinguish between the "poorest of the poor" and the merely poor. Consequently, there is tremendous political pressure for generalized subsidies in the poorest countries, which can least afford them.

In addition, self-targeting can result in an unintended ethnic bias and possibly ethnic conflicts. For example, in Mauritania wheat is consumed largely by one ethnic group, while a second major ethnic group consumes mostly sorghum. Policy measures that lead to an increase in wheat prices, while holding sorghum prices constant, naturally favors one group over another. On the other hand, in some contexts, ethnic targeting would be a cost-effective option, if the political ramifications of such a policy were not so great. For example, in some countries there is evidence that certain ethnic groups have a high proportion of those individuals at nutritional risk. Furthermore, political constraints to implementing a targeted program may arise since it is sometimes argued that some degree of leakage is a political *sine qua non* for a program to be accepted.

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**Governments may face political constraints to effective self-targeting.**

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**Political constraints to self-targeting are often most severe in the poorest countries.**

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## **FUTURE POSSIBILITIES FOR SELF-TARGETING SCHEMES**

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**Several possibilities for targeting food aid merit further research and trial.**

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There are several possibilities for targeting food aid that merit further research and trial. First, it may be possible to create a "less preferred staple" by introducing an improved good that attracts high-income consumers away from the traditional staple food, thereby rendering the traditional commodity more accessible to food insecure households. There is also considerable scope for improved processing technologies for traditional cereals, such as millet, sorghum, and maize in West Africa, that may make them more competitive with rice. In this way, rice may become more of a food of higher income consumers, opening the way to targeting subsidies via maize, millet, and sorghum. For such a strategy to be successful, low-cost processing techniques must be found so that the final processed product can be sold cheaper than rice. To date, the relatively high cost of processing has been a major obstacle.

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**Improved processing technologies for traditional cereals are required.**

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Similarly, there may be scope for introducing new foods that are perceived as "less preferred staples." For example, in Mozambique the government is currently subsidizing consumption of imported wheat. Yet subsidization of wheat products encourages consumption patterns that entail a long-run dependence on food imports. Moreover, it is believed that wheat products are primarily consumed by richer households. The challenge is to identify an appropriate commodity for subsidization, one that is a "less preferred staple." One possibility is sorghum, a commodity once widely produced and consumed, but currently only a staple in more remote rural areas. Another possibility is subsidizing whole yellow maize. White maize is strongly preferred to yellow maize and, as a result, is 33-50% more expensive than yellow maize on the parallel market (World Bank, 1989). Furthermore, potential disincentive effects of the subsidy on local production are reduced since yellow maize is currently not produced in Mozambique.

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**The introduction of new "less preferred staples" is based upon assumptions about the flexibility of consumer preferences over the longer-run.**

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**The applicability of self-targeting schemes entails further research into the nature of food consumption preferences and their susceptibility to change.**

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### **Food preferences**

A fundamental issue is how immutable are the food preferences of the food-insecure in Africa. Traditional notions of poverty, food prices and consumer choice suggest that introducing new, self-targeted foods would be successful. That is, the conventional wisdom is that the food insecure will consume newly introduced "less preferred staples" so as to better meet their nutritional needs. However, such a view may neglect to consider fully the complex cultural and socio-psychological basis of food choices. Consumers may not respond to a 50 percent price differential between yellow maize and white maize, and instead may choose to maintain existing consumption patterns. If that is the case, there may be an active role for the government in attempting to alter preferences through advertising and public relations campaigns.

Exploring the applicability of self-targeting schemes entails further research into the nature of food consumption preferences and their susceptibility to change. In Mozambique, the first step might be a pilot program offering subsidized sorghum or yellow maize. Clearly, more detailed information about food preferences is needed. For instance, U.S.-produced red sorghum for food aid distribution is described as having a bitter taste due to the high tannin content, whereas many African white sorghum varieties, with a low tannin content, are much more palatable (World Bank, 1989). Is high-tannin sorghum a potential self-targeting staple or would such a venture be ineffective?

### **USING SALES PROCEEDS TO PROMOTE FOOD SECURITY GOALS**

Food aid resources can be used to target assistance to the poor without using targeted food subsidies in the traditional sense. That is, local currencies generated through the commercial sale of food aid commodities can be used to improve the situation of vulnerable groups. In 1989, twenty-five Title I and Title III agreements were reached with developing countries that mandated the use of local currencies generated from sales of U.S. food aid for

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**Food aid sales proceeds can be used to fund "self-help measures" that explicitly promote food security.**

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**Food aid resources can support public-works schemes.**

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"self-help measures" (Ferguson, 1990). Self-help measures are designed to "improve the production, storage, and distribution of agricultural commodities" and "enable the poor to participate actively in increasing food production through small farm agriculture." The focus of the self-help measures could be expanded to use food aid sales proceeds explicitly to promote food security aims. There are a number of avenues, including project and sectoral support as well as projects sponsored by non-government organizations, for using sales proceeds to improve the economic environment of the poor and, in doing so, improve overall household food security.

On one level, sales proceeds can be used to improve the functioning of food markets, especially in food-deficit rural areas. The better such markets work, the cheaper they can deliver food to food-deficit households. Improving the functioning of food markets could involve, for example, monetization of food aid to help provide resources to improve market infrastructure and market information systems.

#### ***Food-for-work***

There is also further scope for using food aid to support public works projects. "Food-for-work" schemes engaged in the construction of roads and other infrastructure offer the potential to address both household food shortages and relieve constraints to regional food security posed by inadequate infrastructure. However, on-going research by the International Food Policy Research Institute has demonstrated the need for a significant capital component in implementing food-for-work schemes. Without an appropriate capital investment, the durability of the construction projects is compromised. Some existing schemes have met the need for strong administrative oversight and managerial talent by utilizing both PVOs and local institutions.

"Cash-for-work" schemes financed with food aid sales proceeds may have considerable advantages over food-for-work schemes. Food-for-work schemes, by creating a distribution channel for food

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**However, food-for-work schemes are by no means an ideal targeting mechanism.**

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**Food aid can play a role in reducing extreme seasonal price variations.**

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parallel to the market, may reduce the volume of food traded on the existing market, hence making food prices more volatile. On the other hand, cash-for-work schemes, by offering income-earning opportunities, create effective demand and contribute to the development of food marketing channels. Cash-for-work schemes also eliminate the need for the government to transport food over long distances and then store, pack and distribute it to program participants.

Yet both food-for-work and cash-for-work schemes have limitations which prevent them from being a panacea to the food security crisis. Widows with young children, the ill or the handicapped are often not able to participate. Thus, such schemes may not reach households with the greatest need for food supplements. In addition, targeting becomes less effective the higher the wage that is being offered. If it is above the prevailing rural wage, many applicants may offer to work and resulting allocation of the jobs will not necessarily be based upon need.

#### Seasonal price stability

Food aid sales proceeds, and possibly food aid commodities, can also be used to help temper extreme seasonal price variations. Food insecurity is especially acute in the months leading up to harvest, as household inventories are depleted. This necessitates market purchases at a time when food prices are at their highest. In addition, recent research has demonstrated that a significant proportion of food-insecure rural households are forced to sell foodgrains soon after harvest, when prices are at their nadir, in order to meet immediate cash needs. Therefore, channeling local currencies from food-aid sales into carefully designed credit programs and storage subsidies could enable a greater number of individuals to carry food stocks into the hungry season and enhance household food security. Food aid commodities can also contribute to building national buffer stocks that engage in periodic sales to reduce seasonal price variations. However, price stabilization measures must be undertaken in a



manner that does not create disincentives for private traders to hold stocks.

Food price stabilization policies are often difficult to carry out on a national level, independent of the actions of neighboring countries, due to leakages across borders. For small countries, and those with porous borders, regional price stabilization may be the only effective strategy. Yet regional price stabilization entails a greater degree of cooperation between nations and thus increases the implementation problems.

*Income generation schemes*

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**Sales proceeds can be used to fund income-generation schemes.**

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Finally, food aid sales proceeds can be used to improve the income generation opportunities of the poor. There is scope for further funding of small-scale enterprise development schemes that target the food insecure. Indeed, there are a number of successful examples of community-based lending schemes that have increased the provision of start-up capital to the rural and urban poor. In the long run, small-scale enterprise development, by raising incomes of the poor, can contribute to enhanced household food security.

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## IV. APPENDIX A: ABSTRACTS OF PRESENTATIONS

### A. The Food Security Problem in Africa (Per Pinstrip-Andersen)

The magnitude of the food insecurity problem in Africa is enormous. Statistics from the World Bank show that approximately 25% of the population in Africa is food insecure. Additionally, according to the U.N. Subcommittee on Nutrition, approximately 25% of preschool-age children are "underweight" (i.e., less than 80% of the reference median of weight-for-age).

A common misconception is that most African rural dwellers are subsistence farmers that can meet their household's food needs through own production and sell excess food to purchase household necessities. In fact, a large proportion of the rural poor and food insecure are net buyers of food. Also, a very small proportion of farmers account for a large percentage of total marketed surplus. The implication is that the distribution of benefits from higher food prices will be skewed heavily towards the relatively few large net sellers of food.

Food security measures cannot be limited to the agricultural sector. A large proportion of cash income that is needed by the food insecure originates outside the farm. Small-scale rural enterprises and off-farm agricultural labor markets provide an important source of income for many rural poor. However, input, credit, and technical constraints act as bottlenecks on the supply side for the rural poor. Finally, the agriculture sector provides a market for the goods and services produced by the off-farm rural poor.

The rapid pace of urbanization, 10-12% per year in some countries, exacerbates the food security problem in urban areas. Many of those who migrate to urban areas experience poverty and food insecurity. There is therefore a need for a greater understanding of the urban food marketing chain.

The goal must be on expanding the incomes of the poor rather simply increasing aggregate food production levels. Increasingly food production may play a role in meeting the goal of increased incomes, but is not an end in itself. Efforts to reduce food insecurity also involve lowering the costs of food production and marketing.

As many of the fore-mentioned issues are long term solutions, there is a need for short-term measures such as food-linked transfers. Yet food transfers are difficult to implement in a cost-effective way and, in many instances are not viable in the long run due to fiscal constraints.

Food security research must also focus on the inter-linkages between nutrition, disease, and sanitation. Primary health care and sanitation infrastructure may be prerequisites to improvements in nutritional status and, ultimately, food security.

## **B. UNICEF Efforts at Reaching the African Poor and Malnourished (Dan Toole)**

There are two essential questions that must be asked when attempting to reach the poor in Africa: 1) Who are the poor? 2) What are the primary causes of their vulnerability? It is important to recognize that the poor are not a homogeneous group. The characteristics of the poor differ from region to region. Therefore, UNICEF's approach to improved food security at the household level is on decentralized decision making, resource allocation and project implementation.

UNICEF's mandate is children and women, which means that UNICEF has a target group mandate rather than a technical area mandate. The target group mandate allows UNICEF to address these groups with a multi-sectoral approach. It also requires that some sort of framework be used to address that group. UNICEF's concerns have been with high number of childhood deaths due to malnutrition and disease and their interaction. The underlying causes include insufficient food security at the household level, poor child care, and an insufficient level of basic services.

UNICEF has dealt with, for the most part, immediate causes of childhood deaths due to malnutrition and disease. Although many of these causes need responses (e.g., immunization programs), these tend to be short-term solutions. Unless underlying causes are addressed, there will not be any appreciable changes in the incidence of malnutrition and disease.

UNICEF has focussed on five components in its projects:

1) increased food production 2) improved food crop processing technologies 3) support for income-generating activities for women 4) establishment of food and nutrition information systems and 5) nutrition education, weaning food interventions and child care.

One of the initial findings from UNICEF's experience is that it is very important to work with local structures. The identification of village health and development committees, women's development groups, outreach groups, etc. are important to support the services that government can no longer provide because of decreased budgets. Although some government structures have been supported, UNICEF's basic approach is decentralization and, consequently, decision making and action at the local level.

UNICEF now recognizes that it has underestimated the nature of food security in most settings. There is a need for detailed analysis of micro-level information to identify the different constraints to food security. There is also need to build government commitment to household food security rather than just national food security.

In some countries, the availability of non-farm income is rapidly becoming a more important determinant of household food security than levels of subsistence food production. In other countries, important gains in household food security could be attained through increasing food and cash crop production at the household level.

In summary, the poor are difficult to reach. Targeting through community groups is essential, such as village health committees, where use of growth monitoring, for example, can be used to identify those in need. There must be a clearer understanding of the linkages between food security and child malnutrition and mortality. Finally, food security activities require micro-planning. There is no "Africa-wide" solution. Planning must be done at regional levels to determine who are the vulnerable groups and what sorts of interventions are required.

### C. The African Context (Emmy Simmons)

Food security figures prominently in A.I.D.'s Development Fund for Africa (DFA) Action Plan. DFA is targeted primarily to 20 priority countries, which receive 80% of development funds. There have been increased efforts to program Title I and II food aid in tandem with such support. Improved food security will involve:

1. A decline in the year to year instability of grain supplies. Food aid can play a key role in this objective.
2. Improving emergency response capacity.
3. Targeted interventions.
4. Increased food production, especially by the food insecure.
5. Doing the above in an era of resource-poor governments.

A major issue is defining food security. In some instances, national food security is taken as a synonym for national self-sufficiency. Also, there is often a loose use of the time dimension in discussions of food security so that the distinction between chronic and transitory food security becomes blurred. Finally, food security on a national or household level can co-exist with significant numbers on food insecure individuals. For example, nations are often said to be food secure when the supplies of staple grains available in a given year divided by the mean population exceed 120% of the food requirement. Many governments apply this kind of standard to make budget allocations and formulate policies. However, this measure of national food security may be achieved with the tacit toleration of a relatively high degree of household and/or individual food insecurity. We know little about the links between household food security and child nutrition. There is some question as to whether our current measures of food security are adequate.

The overall objectives of the Development Fund for Africa Action Plan are part of a longer-term effort to address the food security crisis. The objectives are: 1) improving economic performance by redefining and reducing the role of the public sector and increasing the equity and efficiency of public services, health care delivery, education, transportation as well as tax and trade policy reform; 2) strengthening competitive markets to provide a healthy environment for private sector growth; and 3) developing the potential for a long-term increase in agricultural productivity, including "drought-proofing" agriculture.

In conclusion, we need to realize that concepts such as national food security, household food security, and child nutritional status are useful concepts, but for different purposes. Policymakers must be sure of which goal they are aiming for when designing programs and policies.

#### D. Overview of Consumer Food Subsidies (Per Pinstrup-Andersen)

Consumer food subsidies are an important source of income for the poor. They provide from 15% to 25% of the total income of the poor. Although the extent to which food price subsidies depress wages has not been analyzed in sufficient detail, it is known that there is a significant depressing effect. If food prices are kept low, wages tend to be lower than they would otherwise be. Thus, the actual benefits of food subsidies may be somewhat overstated. This means that the savings from eliminating food subsidies may be considerably less than the apparent cost of the subsidies because the public sector would have to increase wages.

When household food security is defined in terms of the absence of fluctuations in household food supplies rather than absolute consumption levels, consumer food subsidies may improve household food security. A series of studies in Asia and the Middle East conducted by the International Food Policy Research Institute (IFPRI) found that food subsidies schemes that provided rations to households at fixed prices did make a significant contribution to household food security as there was a significant increase in food consumption among recipient households. In some cases, consumer food subsidies have had a positive effect on nutritional status as measured by anthropometry. However, the net effect was often considerably less than expected, perhaps due to confounding effects of infection and disease.

Food subsidies can have both positive and negative effects on the agricultural sector. The impact may be positive since they generate more demand for food. The impact can be negative particularly if agriculture implicitly finances the subsidy. Even in those cases where government explicitly finances the subsidy, there can be competition between government expenditures on food subsidies and government expenditures on agriculture.

The cost-effectiveness of subsidy schemes, that is, the improvement in food security and nutrition for a given level of expenditures, is generally very low. Many schemes have been designed with poor targeting or no targeting. Also, food subsidies must be integrated with other interventions since increasing food consumption at the household or individual level may have little effect if there are competing effects, such as disease and infection.

There are many possibilities for targeting food subsidies. Since the cost of household identification is often high, they are presented here in two categories:

##### A. No Household Identification Necessary

1. Geographic targeting
2. Inferior foods
3. Inferior quality foods
4. Time requirements
5. Seasonal targeting
6. Source of income

##### B. Household Identification Necessary

1. Household income
2. Asset ownership
3. Anthropometry
4. Household Composition
5. Employment status
6. Program participation
7. Community informants

### E. Reaching the Target Group (Beatrice Rogers)

This presentation concentrates on the use of "inferior" foods, staples with a negative income elasticity of demand, as a targeting mechanism. In such a instance, no household identification is necessary. It is important to recognize that what economists call "inferior foods" are not necessarily foods of inferior quality. They are simply less preferred foods, so that as incomes rise, people chose to consume less of these foods.

The attraction of such "less preferred staples" is that they provide a self-targeting mechanism. "Self-targeting" is a fairly low-cost method of targeting since it requires no household identification and very little administrative infrastructure. Since household consumption choices are made based upon the household's food preferences and budget constraint, poorer households would presumably chose to consume the subsidized "less preferred staples," while richer households would consume more preferred, unsubsidized foods. This type of scheme can have some degree of leakage before administrative targeting more cost-effective. Second, this type of scheme has political value since citizens often place importance on the ability of the government to make available low-cost staples.

However, there are problems with this type of scheme. There is the difficulty of selecting an appropriate food. If an "less preferred staple" is distributed, there is a greater probability that it will end up being competitive with animal feed. However, if a food is identified that is not truly "inferior", then there will not be any targeting effect at all.

Targeting makes sense only if the needy groups constitute a small proportion of the population. If a vast majority of the population is "needy" then there is no need to target. The results of a study conducted by Dr. Rogers and Melanee Lowdermilk in Mali showed that there were not important distinctions between the food consumption patterns of the top and bottom quartile of the sample based on total household expenditure per capita. According to these results, when high per capita expenditure groups were compared to those in the lowest expenditure quartile, the percentage of the calories from different staple foods did not vary a great deal. Thus, in Mali, an "inferior" staple food did not exist. It was also hypothesized that as household income increases, more individuals, such as extended family members, depend on that household for support. Therefore, identifying a target group that is less "well off" than the whole population becomes problematic. Thus, there is a need for situation-specific, micro-level analysis. A well-designed targeting mechanism requires data on the characteristics of the target group, including their consumption patterns, nutritional needs, and familial responsibilities.

The appropriate food for a self-targeting approach cannot be identified based on a priori assumptions about which foods are likely to be self-targeting. The Mali study showed surprising results, where income was not correlated with the proportion of different staples consumed. When groups that had varying levels of income were compared, both groups ate both rice and millet in approximately the same proportions, although the amounts differed.

Preferences for a food or unit price of a food should not be the only factors in determining an appropriate food for a food subsidy scheme. One reason for the similar consumption patterns among both "rich" and "poor" is due to the high time costs in the preparation of millet and sorghum as compared to rice. The real costs of consuming each good must be considered, which includes preparation time, fuel costs and the convenience of the food.



The real price differential between foods may not be as great as the initial comparison of retail prices might lead one to believe. To identify an effective self-targeting food, the whole food system of a household must be understood, i.e., the system by which households choose foods to purchase and prepare. Such a system includes consideration of who purchases and prepares food and other commitments and constraints on household labor.

Improved food processing can increase the potential for self-targeting. A food may be a more effective self-targeting mechanism if the processing time can be reduced. Unfortunately, the success of home grinding of grains has not been great, perhaps due to the high costs of grinders and the difficulty in obtaining replacement parts. At the industrial level, a processed food that is of perceived lower quality, may in fact, be an effective self-targeting food.

### F. World Bank Efforts in Madagascar (Quaiser Khan)

In the wake of the structural adjustment program in Madagascar, agricultural prices have increased, and production has increased to a point where there was no need to import rice in 1989. However, chronic malnutrition in the country has increased, which may be a function of rising food prices.

Last year, the Bank put into place a Social Action Program which included three food provision sub-components, the better known of which, though less important in budgetary terms, was the Cantines Populaires. These were food stalls selling subsidized meals to the general public. The original intent of the program was to provide self-targeting meals in poor areas but the government decided to provide meals based on rice, which is the preferred staple in Madagascar. Some of these stalls were also located in areas close to government offices. These two factors subverted the original intent of the program, and the Bank decided to stop supporting these programs in early November, 1989. However, recently, the government took the necessary steps to honor the spirit of the agreement. They replaced rice meals with self-targeting meals based on cassava or maize and have also closed down the stalls close to government offices. As a consequence of these changes, the clientele at these stalls is from the poorest parts of the urban population, and the Bank agreed to resume support to the program as of mid-April, 1990.

The second component of the World Bank program in Madagascar is working with women's groups in different communities, specifically on child feeding programs. Such programs used weight gain of children as the main indicator for identifying potential participants. However, there were administrative and organizational problems with the scheme. For example, there were instances where the children were not properly identified for inclusion into the feeding program. Various changes have been made in the program and now the program has become more selective. By February, 1990, the program should be targeting mostly acutely malnourished children.

The third and last component of the program was a self-targeting feeding program based on subsidized distribution of a highly nutritious food. This component has not been implemented, however, because no private sector entity has presented a convincing proposal about how to produce such a food that will be in the reach of the poor.

Finally, the Bank is in the process of preparing a national nutrition program. One of the components of the program will focus on food security, evaluated using nutritional status indicators.

### G. Food Subsidies in Tunisia (Moez Doraïd Yusef)

The advantages of self-targeting schemes that have already been discussed in the workshop, can easily be summarized. A self-targeting scheme is cost-effective in that it minimizes leakages without sacrificing coverage of the targeted income group. It also does not require much in the way of administrative infrastructure.

However, self-targeting schemes do have certain disadvantages. There can be leakage to animals where an inferior food is used as animal feed. Also, the political acceptability of self-targeting programs should not be taken for granted. In some instances, the scheme may create political resentment. For example, a study in Pakistan found that consumers in all income classes considered the subsidized staple (whole-wheat flour) to be less desirable than other types of flour. Poorer consumers, who tended to purchase the subsidized staple, objected to the government provision of a "lower quality" flour. The political consequences of subsidizing an inferior food are less evident where the need is severe. In Bangladesh, subsidized inferior grain such as red sorghum was well accepted by the low-income population.

The most difficult problem with self-targeting is selecting the commodities to carry the self-targeted subsidies. In some cases, if the consumption patterns of the poor and the rich are similar, there may be no food suited for a self-targeting scheme. When investigating the appropriateness of using a foodstuff for a subsidy scheme, one must consider the consumption patterns of different income groups as well as the use of commodities for animal feed.

There are three selection criteria for a self-targeting staple. First, it should be an economically "inferior good" in that it has a negative income elasticity of demand. Second, the food should have a relatively high intensity of consumption among the target group. Third, the food should be inappropriate for use as animal feed, or there should be available means to prevent using the inferior subsidized food for animal feed. For example, in Tunisia, durum wheat, the commodity that appeared to be a potential carrier of food subsidies, was more expensive than commodities used as animal feed. Therefore, there was little probability that it would be used as animal feed. This was a fortunate circumstance that may not occur in other settings.

Obviously, a foodstuff whose consumption patterns and nutritional value fit the above-mentioned criteria would be ideally suited for a self-targeting scheme. However, in most settings, none of the widely consumed foodstuffs displays all the qualities required in an ideal carrier of subsidies. In every setting, though, some foodstuffs are better qualified to act as carriers than others. As a result, a need arises to rank foodstuffs according to the degree to which their consumption and nutritional characteristics conform with the ideal criteria. There are two major problems, however, with ranking foodstuffs based on their suitability as a self-targeting commodity. First, the data needed to test for the relevant criteria are often lacking, especially in Africa. Disaggregated household consumption surveys are thus needed to design self-targeted subsidy programs in Africa. These surveys should provide information on the variations in the consumption of different foodstuffs by region, income and season; the budget and caloric shares of each major foodstuff for various income groups in different regions and seasons; and the uses of each foodstuff within households in order to assess whether they would be used as animal feed if subsidies are shifted to them.

The second problem with the proposed ranking is more difficult to solve. In many settings there is an inconsistency in the ranking criteria between all or some foodstuffs. For example, in some countries the poor spend only a small share of their income on the foodstuff that has the lowest income elasticity of demand (e.g., barley in Morocco and Tunisia). In other cases the subsidized foodstuff whose purchases and consumption represent the largest budget and caloric share for the poor is one with a moderately high income elasticity of demand and a high degree of subsidy leakages (e.g. bread in Egypt, Morocco and Tunisia). It is important to note that in some settings these problems do not exist.

One way to resolve these problems is to assign a weight to different ranking criteria. The criteria relating to budget and caloric shares should be weighted heavily in settings where the alleviation of poverty and malnutrition is a top priority. On the other hand, income elasticities, subsidy leakages and potential for use as animal feed should be weighed heavily in settings where subsidy cost reductions are a more important priority.

It may also be possible to create an inferior commodity rather than to identify one by introducing a commodity of superior quality that would attract demand away from inferior goods, and thus render the inferior good capable of carrying the self-targeted subsidy. This may coincide with donor privatization efforts. Countries that wish to implement self-targeted subsidies can encourage the private sector to provide a superior commodity and the public sector would be left to provide the inferior subsidized commodity.

### Discussion

In Morocco, a high-extraction-rate flour was used as a targeted food subsidy for the poor, which seems to be working well. When applied to Tunisia, however, high-extraction-rate flour was considered a superior good; it is considered a more nutritious food, is sold in boutiques at a much higher price, and therefore, was not an effective carrier of self-targeted food subsidies. Self-targeting using the quality of the commodity was recommended for Tunisia. The government subsidizes a low-cost imported oil that is readily available on the market and is widely purchased and consumed. It was recommended that the private sector be allowed to import pure grain oils from Europe to sell at a higher price. This may cause the demand for low-cost oil by the rich to decline and reduce the government's subsidy burden.

Although a targeted food subsidy scheme can be created, it is important to not only identify an appropriate food, but also to determine its availability. In Bangladesh, sorghum was identified as the commodity to carry a subsidy because of its position as a "inferior" good. However, when sorghum was presented as a potential carrier of a targeted food subsidy, sorghum was not available in surplus for U.S. food aid. In Sri Lanka, it was thought that wheat had potential to be a carrier of a food subsidy, but all of it would have had to be imported, which would have involved a prohibitively high cost.

There is a very close connection between severe production shortfalls and a deteriorating nutrition situation and food insecurity. By focusing on the consumption side, there may be a lack of emphasis on the what creates much of the food security problem in many parts of Africa— large fluctuations in production and poor market infrastructure. Fluctuations in production lead to very large price fluctuations, which then hit hardest the fairly large proportions of the population which buy their food from the market. Roads and marketing networks must be examined as a way of reducing price instability as well as making food available.

#### H. The Scope for Targeting in Mali (John Staatz)

This paper examines the scope for and limitations to using targeted consumer food subsidies to improve the nutritional status of the poor in Mali. It does not evaluate an existing targeted food subsidy program. Rather, it briefly describes Mali's experience with food subsidies prior to 1981 and analyzes the potentials for and barriers to moving to more targeted approaches. The paper draws on results of research carried out in rural Mali since 1985 by the Malian Food Strategy Commission (CESA) and the Department of Agricultural Economics, Michigan State University.

Cereals account for 70% of the calories in the average Malian diet. Three cereals (millet, sorghum, and maize) provide 85% of the total calories derived from cereals. There is little centralized distribution of grains. Managing imports is one of the few ways in which it might be possible to implement a targeted subsidy program. There is a very limited administrative capacity to run a targeted scheme.

The official marketing system in place in Mali prior to 1981 represented a de facto targeted subsidy program aimed at benefiting public-sector employees. Since 1981, the program has been progressively dismantled in favor of a more liberalized economy.

Not all rural households in Mali are self-sufficient in basic grains. Approximately 43% of the rural households in the grainbelt of southern Mali were net purchasers of grain during the good rainfall years of 1985/86 and 1986/87. Therefore, the market plays a key role in ensuring household food security, but is by no means a panacea. Some households cannot afford the basic goods that are available on the market. Since the state cannot afford to handle all the grain distribution, there is an interest in trying to allow the market to serve those who have the purchasing power. But how can those who don't have the purchasing power be reached?

Two important issues arise in the discussion of potential food subsidy schemes in Mali. First, whatever the public sector does, it should do with clarity, since the unpredictability of public-sector actions is disruptive to the private trade. Second, food aid can be used in two ways. The commodities themselves can be used, and the sales proceeds from food aid can finance certain programs.

Currently, food aid targeting in Mali is strictly geographical. A major problem with this type of approach is that there is considerable hunger outside of the geographical boundaries the program serves. Within a township there is no targeting. Distribution is often implemented through local authorities, who distribute the food according to their own predilections.

There are a few alternatives. First, food aid could be used as part of a seasonal targeting approach. Food aid or sales proceeds could be used to help reduce fluctuations through buffer stock operations or as a rent subsidy on storage. In this scheme, those who are net buyers of grain would benefit, particularly those who are forced to sell grain early in the season to meet cash needs, i.e., for tax payments, then re-buy grain back during the hungry season. Those who are constant market buyers would also benefit since they also buy late in the season when prices are high.

Another possibility is a cash-for-work program, rather than a food for work program which creates parallel systems for food distribution. One of the problems with the market in Mali is that it is highly residual and therefore fluctuates greatly. If grain could be sold, people could use the cash to buy grain through the market. Consequently, the market volume would increase. A demand for food would be created while at the same time supplies would be introduced into the system. The increased volume could augment market stability.

There is also potential use of supplemental feeding. A food subsidy can be used to bring in mothers and children into clinics for health education as well as the traditional meals. There are also a number of uses of food aid sales proceeds for the improvement of the marketing system.

A final suggestion is the use of food aid sales proceeds for tax relief. Many farmers are forced to sell grain early in the season to obtain cash to pay the head tax. Reflow money could be used to compensate the government for deferring the head tax until later. In a sense, this is a self-targeting mechanism since the poor could not pay the tax later in the season.

The move towards market liberalization in Mali has shown that grain has been made more available to deficit families, if they have the income to buy grain. Ameliorating food insecurity will require helping the market work through better marketing and transport infrastructure, as well as increasing incomes by providing income generating opportunities for the poor.

### *L. Combatting Malnutrition in Urban Kinshasa (Jay Drasin)*

The A.I.D. Title II MCH Project is a unique pilot program currently being managed by the PVO Organization for Rehabilitation through Training (ORT). The project in Kinshasa involves a commercial weaning food manufacturer, Centre du Developpement Integral, and a primary health care organization, Sante Pour Tous (SPT).

The project aims to increase the consumption of maize meal by children under the age of five as an alternative to cassava, the nutritionally inadequate root that dominates the diet. Currently there are 50 health centers throughout the 24 zones of Kinshasa, and these centers constitute the basic means of reaching mothers and children. In addition, through the formation and training of women's voluntary groups, called Mamans Bongisa, which serve as community liaisons, the centers reach mothers who do not visit the clinics. These groups monitor neighborhoods to identify at-risk families.

One of the achievements of the project has been the production of the weaning food CEREVAP at one-tenth the cost of imported weaning foods. The weaning food is sold in 210 gram packets in cereal form and is simply mixed with boiling water. Its primary components are maize and soya, but it also contains powdered milk, oil and salt. The project has also seen the tripling of CEREVAP sales in Kinshasa in a three-year period.

The project also conducts growth monitoring on approximately 50,000 children. Malnourished children undergo nutritional rehabilitation, which involves four visits per week over a three-month period. Given the demands on women's time, there have been problems getting the children to come into the clinics on a regular basis. Children are often brought in by older siblings or dropped off at the clinic early in the morning.

A major lesson of the experience of ORT is the need to look at the local-level institutions such as PVOs, private food manufacturers, and health care providers that have interests in the areas related to the use of targeted food aid. Such institutions can be instrumental in designing targeted interventions.



## *J. Mozambique Case Study (Jane Armitage)*

Food security problems are enormous in Mozambique today, affecting about half of all households in some degree and severely affecting at least 30% of households in both rural and urban areas. Levels of acute and chronic malnutrition are exceedingly high (at the upper end of the range seen in Sub-Saharan Africa) and demonstrate the extremely precarious nutritional situation of Mozambican families, suggesting that even small further shocks could precipitate mass starvation. The factors contributing to food insecurity and nutritional stress are many, including the continuing warfare, which has meant widespread displacement of rural households and disruption of trading and communications networks, climatic disasters, past failures in economic policy and the inevitable shocks from needed economic adjustments, and poor health and sanitary conditions.

Bearing in mind the constraints imposed by poor military security and weak institutional capacity, there are a number of options for improving food security through greater efficiency in the utilization of available food and other resources and through better targeting to vulnerable groups. The basic strategy proposed is to concentrate resources on increasing the productivity of smallholders and on creating sustainable employment and income-generating opportunities for the most vulnerable households rather than on distribution of free or subsidized food on a large scale. However, these efforts need to be complemented by improvements in access to basic public services such as health, education, clean water and sanitation, and by a limited "safety net" of direct and indirect income transfers as necessary to prevent serious malnutrition or starvation.

Augmenting national food supplies with food aid is an essential component of food security in the current Mozambican situation of disrupted domestic production and foreign exchange scarcity. Since food aid constitutes a resource of considerable magnitude in Mozambique, its use should be subject to the same efficiency standards that are applied to the use of financial resources. To increase the efficiency with which food aid and sales proceeds are used, there is a need to: 1) develop a framework for the management of sales proceeds and set priorities for the use of such revenue; 2) review the financial and management position of public food trading enterprises to reduce discrepancies in the value of food aid sales and actual receipts by the Ministry of Finance; 3) ensure better coordination of food aid arrivals; and 4) where feasible, increase monetization of food aid once inside the country, as money is cheaper to move than food and can be used more flexibly.

Despite the uncertain security situation, efforts to increase agricultural productivity could be expanded. Given the recent government action to restore price incentives for agricultural production, further steps to encourage recovery can be taken. Public investment should concentrate on the family (rather than the state) sector, from the standpoints of both enhancing sectoral productivity and increasing household food security. This will involve improving provision of basic agricultural services (research, credit, training and extension), improvements to the marketing system and development of specific interventions for areas with high drought risk or land scarcity. Initial attention should be concentrated in the 40 districts selected by the government as having high agricultural potential and/or a strategic safe location.

Although increasing productivity of family farmers should help improve food security for many households, the potential for widespread rural development remains limited until the

security situation is resolved -- thus necessitating complementary measures to increase non-agricultural employment and income-generation in rural as well as urban areas. Therefore, the report explores ways to increase employment through a combination of: 1) assistance to labor-intensive small businesses in the private sector; 2) training programs targeted to unemployed members of the poorest households; and 3) public employment programs focused on developing/maintaining basic infrastructure. It is recommended that jobs so created be targeted explicitly to members of vulnerable households, using self-targeting devices such as paying less than minimum wage or promoting micro-enterprises and informal sector activities which tend to have a greater proportion of low-wage workers.

Taking into account the likely difficulties and time involved in putting in place large-scale agricultural development/employment programs and the existence of labor-scarce households (e.g., with disabled household heads) unable to benefit from employment opportunities, there is a need to establish a temporary safety net comprised of three complementary parts, each designed to address the needs of particular target groups. The first proposal involves indirect income transfers through subsidies on so-called "inferior" commodities, such as sorghum or yellow maize, which are consumed mainly by the poor. Currently, wheat is heavily subsidized. However, wheat cannot be produced domestically on a large scale, it has a high-cost relative to other cereals, and most importantly, it is a preferred commodity consumed mainly by the rich. If the wheat subsidy were transferred to maize or sorghum, there would be a greater nutritional impact with no increase in budget outlays. A second option involves adjustments to the urban rationing system. For example, the government could heavily subsidize imported yellow maize, a commodity believed to be the least preferred staple grain in Mozambique. Finally, it may be possible to provide direct income transfers to the roughly 10-15% of households identified by local leaders to be most vulnerable on the basis of pre-established criteria. By helping to maintain human capital in a difficult period, the safety net would not only help families in need but also be a vital contributor to longer-term socio-economic development and growth.

## V. Appendix B: List of Participants

<u>Name</u>	<u>Affiliation as of November 1989</u>
Per Pinstруп-Andersen	Cornell University
Jane Armitage	World Bank
Melody Bacha	AID/S&T/RD/EED
Merritt Broady	AID/FVA/FFP/AFR
Catheryn Cochran	Carter Presidential Center
Owen Cylke	AID/AA/FVA
Kathleen DeWalt	University of Kentucky
Jay Drosin	ORT (Organization for Rehabilitation through Training)
David de Ferranti	World Bank
Marco Ferroni	World Bank
Judy Gilmore	AID/FVA/FFP/AFR
Dale Hill	World Bank
Raymond Hopkins	Swarthmore University
Quaiser M. Khan	World Bank
Mary Kilgour	AID/FVA/FFP
Lynel Long	AFR/DP/PPE
Jerre Manarolla	AID/FVA/FFP/PAD
Tom Marchione	AID/FVA/PPM
Jeanne Markunas	AID/FVA/FFP/POD
Melanie Marlett	AID/PPC/PDPR
Shane MacCarthy	AID/FVA/PVC
Elizabeth McConnell	AID/S&T/RD/EED
Judy McGuire	World Bank
Patricia O'Brien-Place	AID/AFR/TR/ANR
Jon O'Rourke	AID/FVA/FFP/PAD
Jim Pines	Consultant
Beatrice Rogers	Tufts University
Irwin J. Shorr	Consultant
Emmy Simmons	AID/AFR/DP/PPE
John Staatz	Michigan State University
Hope Sukin-Klauber	AID/FVA/PPM
Daniel Toole	UNICEF
Laura Tuck	World Bank
Cornelius Tuinenburg	World Bank
Joachim von Braun	IFPRI (International Food Policy Research Institute)
Michael Yates	AID/S&T/RD/RRD
Moez Doraid Yusef	Harvard University