

MARKET ANALYSIS NOTE #6

*Grain Market Research Project
Ministry of Economic Development and Cooperation
March 1998*

Food Aid Targeting in Ethiopia: A Study of Household Food Insecurity and Food Aid Distributions¹

Introduction

For more than two decades, annual distributions of hundreds of thousands of metric tons of food aid have been channeled into safety net programs designed to alleviate the impact of food shortages in Ethiopia. Despite the massive size and duration of this effort, there remain many unanswered questions about its effectiveness and about its longer-term impact on the population it is designed to benefit. Recently, government and donor concern about Ethiopia's increasing dependence on food aid, coupled with the implicit demand for greater accountability in its use, has spawned great interest and debate about how efficient the food aid targeting system is in ensuring that food reaches those who need it the most (Sharp 1997). A second, related fear is that large quantities of food aid, if poorly targeted, may depress market prices for food and may result in domestic production disincentives (Jayne and Molla 1995; Molla et al. 1997; Maxwell et al. 1994). Both of these concerns are expressed in Ethiopia's National Policy on Disaster Prevention and Management (TGE 1993).

This analysis note examines food aid targeting efficiencies and the determinants of food aid distributions in rural Ethiopia during the 1995-96 agricultural year. It is based on survey data from a nationwide, randomly selected sample of 4,166 farm households. The findings and conclusions presented here are intended to help inform ongoing debate in the area of food aid targeting.

Food aid targeting is here defined as "restricting the coverage of an intervention to those who are perceived to be most at risk in order to maximise the benefit of the intervention whilst minimizing the cost" (Jaspars and Young 1995). Targeting errors of *inclusion* (distributions to food secure weredas and households) and errors of *exclusion* (no distribution to food insecure weredas and households) are estimated by comparing household-level food availability with household food aid receipts.

Household-level food availability is measured as all inflows of food grains over the 1995-96 agricultural year (production, purchases, exchanges received) minus all food outflows (sales and exchanges given). Food aid receipts are measured at the household level by type of commodity, month received, and type of program (e.g., free food, food for work). Survey results show that, overall, 20.0% of farm households participated in food aid programs during the 1995-96 reference period. Free food distributions account for the largest share at 64.6% of food aid received by sampled households, with the remaining 35.4% being distributed through food-for-work programs.

Discussion of Key Findings

Even in this relatively good harvest year, results show that 43.2% (3.8 million) of Ethiopia's farm households are food insecure, or have available for consumption less than the minimum nutritional requirement of 1,680 kilocalories in grains (Figure 1). The deficit households show a total food gap of 1.4

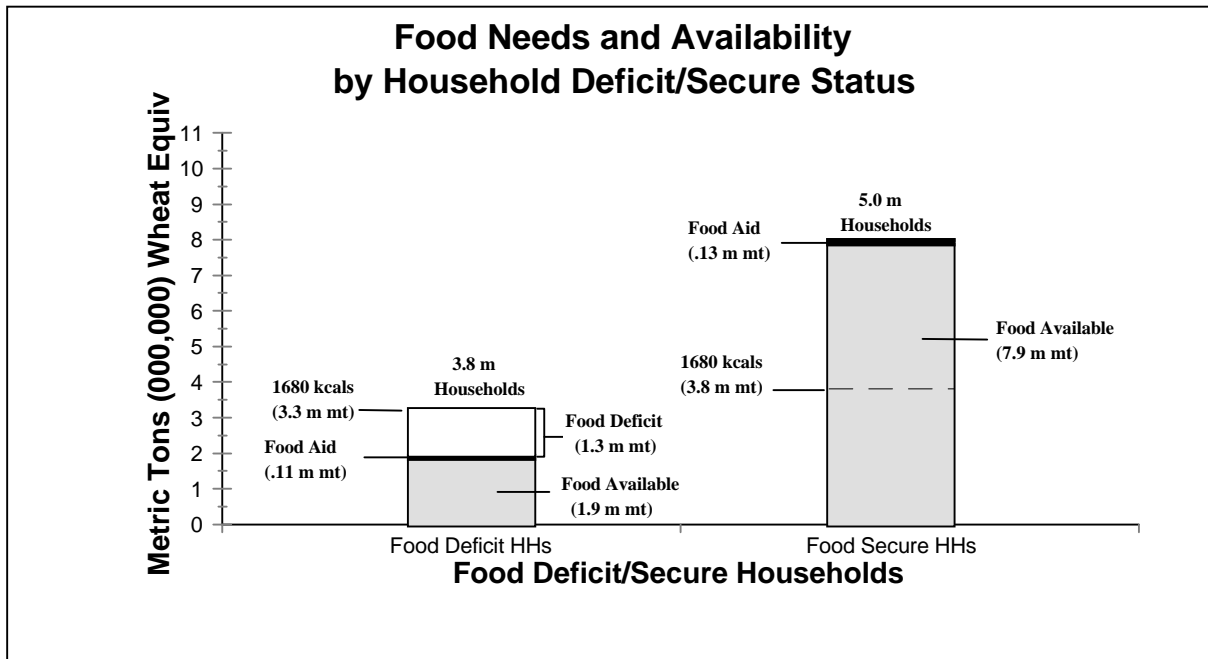


Figure 1

million metric tons (difference between food available and food needs at 1,680 kilocalories per person per day requirement from grains). Food aid distributions reduced this deficit by approximately 8%, to 1.3 million metric tons.

Food aid programs, either in the form of free food or food-for-work are vital to the health and well-being of these deficit households. Targeted deficit households succeed in lowering their food deficit from 735 kcal per person-day to 313 kcal, or by an average of 59% through the receipt of food aid. However, due to unsuccessful food aid targeting overall, only 22.3% of these deficit households are selected as beneficiaries. The remaining 77.7% of food insecure households have no food aid safety net.

A key finding of the study is that there is no significant association between household food availability (need) and food aid receipts (either free or food-for-work) during this sample year—a result of high errors of exclusion and inclusion at both the wereda and household levels. This finding holds true even when controlling for other key characteristics of the households such as age, gender, and education of the household head, off-farm income, land and livestock ownership, family labor availability, and fundamental agroecological characteristics of weredas such as rainfall and elevation.

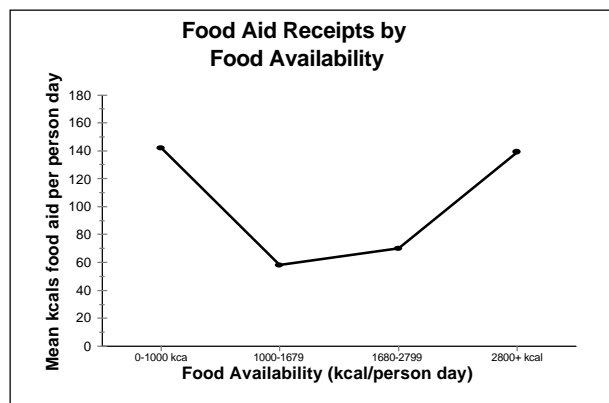


Figure 2

Results also show that, all else equal, improved wereda-level targeting has greater potential for reducing these errors than does improved household-level targeting. There is greater variation between weredas in terms of household vulnerability than there is within weredas.

Four factors are identified as principal causes of the high level of targeting error and the resulting low correlation between food insecurity and participation in food aid programs. They are as follows:

Needy and well-off are food aid beneficiaries. First, the primary beneficiaries of food aid programs are found to be households at the extremes in terms of food availability: those with the least and those with the most food available (see Figure 2). This pattern seems to hold across numerous regions of the country. While targeting efficiencies are enhanced by the provision of food aid to the most vulnerable group, they are seriously reduced by the flow of food aid to food secure households. Sharp, in her 1997 review of food aid targeting in Ethiopia, and Hill (1994) have alluded to the potential for community-level factors to unduly influence the system in the selection of beneficiaries. Such factors may include, “deliberate manipulation of distribution systems by those in control... resistance by local authorities to the general principle of prioritizing the needy, and the political use of food aid for electioneering” (Sharp 1997, p. 34). Our data do not permit us to count out these sorts of explanations for why highly food-secure households receive the quantities of food aid that they do.

Over emphasis on women and the aged. Second, the Food Security Strategy (FDRE 1996) and the beneficiary selection criteria used by several key NGOs involved in the distribution of food aid underscore the special vulnerability of women and the elderly under conditions of food shortages. Our data show that a disproportionate number of female and aged heads of households received food aid, irrespective of their food needs (see Figure 3). We found that households headed by women and those aged 60 years and above are no less food secure than are those headed by men or younger farmers. When broken out by type of food aid program, all of the “over-targeting” of women and the elderly occurs in the distribution of free food; food-for-work receipts show no significant differences by gender or age. Thus, the practice of targeting women and the aged, to the extent that it is used exclusively in place of truly need-based criteria, has contributed to increased targeting error.

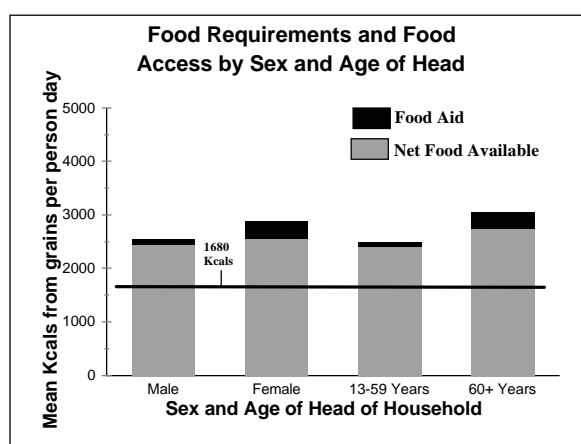


Figure 3

Lack of flexibility. Third, the strongest determinant of food aid receipts is the number of years over the past five years or more that households have received food aid (see Figure 4). This is largely because

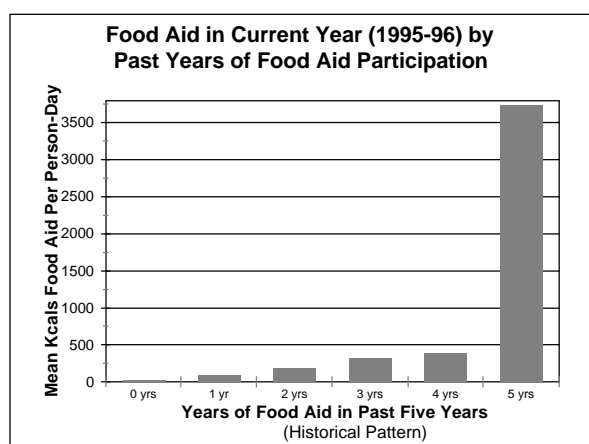


Figure 4

years of food aid reflect the progressive build-up of “institutional capacity” in the food aid delivery system over time. By this we mean the investments made by government agencies and NGOs in such things as personnel, contacts and knowledge of the area, offices, trucks, and institutional reputation. All of these investments create a compelling reason to continue the flow of food aid to the same areas it has always gone—areas known for chronic drought and food shortfall. Because of the tremendous flow and momentum built up in the food aid delivery system, altering its course to meet the needs of deficit households in other areas of the country that may not benefit from the same extent of

infrastructure and institutionalization, is a formidable challenge, one that was not met in 1995-96. Improving the flexibility of the food aid delivery system to extend or shift the safety net when conditions require is a concept that clearly needs greater attention; current inflexibilities in the system are a major cause of food aid mistargeting in Ethiopia.

Regional concentration. Fourth, households in the region of Tigray are far more likely to have received food aid, regardless of need, than households in any other region, thereby decreasing targeting efficiency (see Figure 5). Part of the reason for this flow of food aid to the region is that Tigray is one of the country's historically deficit areas in which a significant investment in food aid

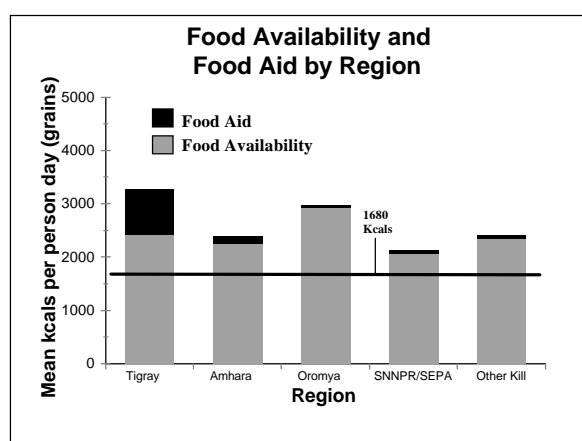


Figure 5

institutional capacity has been made. The region is also known for its substantial community-based development projects and large public works programs (micro-irrigation, dam construction, soil conservation, etc.) that are implemented as food-for-work activities. Because of the labor-intensive nature

Table 1. ANOVA and Multiple Classification Analysis of Food Aid Distributions by Food Availability and Region, Controlling for Covariates*

	Predicted Mean Kcal Food Aid per Person-day			Sig. of main effects
	Unadjusted (a)	Adjusted for Factors (b)	Adjusted for Factors and Covariates (c)	
<i>Food Availability (kcal) per person-day</i>				0.484
Extreme Food Deficit HHs (<1000 kcal)	141	117	97	
Moderate Food Deficit HHs (1000-1679 kcal)	58	72	71	
Moderate Food Security HHs (1680-2799 kcal)	70	76	75	
High Food Security HHs (2800+ kcal)	133	135	152	
Eta/beta	0.02	0.02	0.02	
<i>Region</i>				0.000
Tigray	829	824	455	
Amhara	99	102	64	
Oromya	23	22	80	
SNNPR or SEPA	30	29	86	
Other killil	35	38	79	
Eta/beta	0.13	0.13	0.06	

*Covariates (sig.): Age (.024) and sex (.023) of head; food aid in wereda (.763); land (.696); TLU (.523); off-farm income (.976); household labor (.181); years of food aid (.000); and rainfall (.776).

of these projects, it is conceivable that a large number of food secure households may benefit from participating in them. As Sharp (1997) puts it, “despite the openness and fairness of the community targeting system in Tigray, the tendency to spread food aid within communities, and the pressure on the *baito* members to include as many people as possible, seem to be the same here as elsewhere.”

But only about half of Tigray’s success in attracting food aid can be accounted for by such built-up capacity and infrastructure. Multivariate analysis reveals that other factors must also be taken into consideration, factors not measured in this study (see Table 1). As with the finding described above regarding the flow of food aid to the most food secure households, inconsistencies between stated national food aid targeting goals and the delivery system as it is practiced, may be worthy of deeper consideration and further research. Such research should have two objectives: first, to directly test the hypothesis that the institutionalization of food aid can be detrimental to targeting objectives, particularly in harvest years that do not conform to historical patterns; and second, to examine the types of disincentive effects that observed targeting errors may exert on food grain production and marketing in areas where they may occur.

Implications and Recommendations

Based on the results of this study and subsequent discussions with major participants in the food aid delivery system, several key study implications and recommendations for improving food aid targeting in Ethiopia have emerged. They are as follows:

Area targeting:

Increase flexibility in the food aid delivery system. Ethiopia’s food aid delivery system has built up capacity primarily in areas of chronic food deficit. As a result, food aid continues to flow to these historically deficit areas even in years such as 1995-96 when some of the more severe food shortages are found in other areas of the country. The key challenge is to modify the system in ways that will make it more flexible, with the capacity to respond to food needs *wherever* they may occur.

Emphasize area targeting. More emphasis should be placed on identifying the most food insecure weredas (area targeting) as the first step in the food aid targeting process. Efficient area targeting has a greater likelihood of reaching vulnerable households, and possibly at lower cost, than does household-level targeting. Also, the effectiveness of household targeting may be enhanced by accurate area targeting, at least in those areas where the majority of households are food insecure.

Coordinate crop production estimates. The Central Statistical Authority, the Ministry of Agriculture, the Food and Agriculture Organization Crop Assessment Missions, and others currently publish annual crop production estimates. These estimates are often inconsistent and, at times, even contradictory in their implications for food aid programming. As crop production estimates currently constitute the basis upon which needs assessments are made, it is important that efforts be made to understand differences in the methodologies used and to coordinate their interpretation for purposes of a unified approach to food aid deliveries in Ethiopia.

Complete area targeting guidelines. Current efforts by the DPPC in the preparation of food aid targeting guidelines at the national and regional levels and for the various socio-economic systems (sedentary agriculture, pastoralists, cash-crop producing areas, etc.) should be finalized and implemented.

Expand area vulnerability profiles. Current efforts by the DPPC to prepare vulnerability profiles for disaster-prone areas should continue and be expanded to cover more areas. Vulnerability profiles facilitate needs assessment and the identification of appropriate interventions in the areas they cover.

Household targeting:

Underscore national policy on food aid targeting. Consistent with the National Policy on Disaster Prevention and Preparedness, priority should be given to targeting the most food insecure and poorest of the poor households in emergency (employment generation schemes) as well as food aid development (food-for-work) projects. Wereda and peasant association officials currently hold authority for the local-level

selection of food aid beneficiaries. Increased sensitization and awareness of the National Disaster Prevention and Preparedness Policy should be pursued aggressively to facilitate a better understanding of the National Policy among those entrusted to implement it.

Rethink the guidelines and criteria used for identifying the most vulnerable households. The current focus on women and the elderly is not an effective way to target food insecure households. Indicators that reflect household food availability per adult equivalent will help improve targeting efficiencies.

Eliminate local pressures that undermine effective targeting. Actively reinforce the importance of targeting vulnerable households and assist local-level food aid administrators in eliminating the pressures and incentives to distribute food aid to the more food secure households.

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Notes

1. This note is based on research initially reported in: Daniel Clay, Daniel Molla, and Debebe Habtewold . 1998. "Food Aid Targeting in Ethiopia: A Study of Household Food Insecurity and Food Aid Distributions." GMRP Working Paper #12. Ministry of Economic Development and Cooperation. Addis Ababa. Support for this research was provided by the United States Agency for International Development Mission to Ethiopia and by the Ministry of Economic Development and Cooperation of the Government of Ethiopia, under the Food Security II Cooperative Agreement. The authors gratefully acknowledge comments from members of the Technical Committee of the Grain Market Research Project, from the Disaster Prevention and Preparedness Commission (DPPC), and from members of the community of donors and NGOs involved in the food aid delivery system.