



## Food Aid Among East African Pastoralists

Erin Lentz and Chris Barrett,  
Cornell University  
Pastoral Risk Management Project

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*Using household-level panel data collected quarterly between June 2000 and December 2001, we explore the efficacy of food aid targeting among pastoralist households in northern Kenya and southern Ethiopia. We then extend this analysis to explore how food aid impacts private intra-community transfers, so as to establish whether food aid perhaps crowds out private transfers or if it maybe reaches intended beneficiaries indirectly through induced private reallocations even if its direct targeting proves relatively imprecise. Preliminary results indicate that food aid volumes are very modest, on average, contrary to widespread claims of food aid dependency. Food aid is not well targeted by income or wealth and appears to suffer from some inertia. However, food aid flows especially to locations suffering low rainfall levels while private transfers respond to household-specific asset shocks. By itself, food aid does not significantly impact private transfers. Therefore, there is little evidence of food aid either crowding out private transfers or being indirectly targeted effectively.*

### Background

Food aid in east Africa has received considerable attention in recent years. Ethiopia, now the largest food aid recipient worldwide, received more than US\$500 million in food aid flows from the United States alone in 2003. Donors and Ethiopian policymakers worry openly about food aid dependency. In Kenya, highland farmers have protested the inflow of food aid into their country, arguing that it depresses local maize prices. Internationally, a longstanding dispute between the United States and Europe over the possible commercial trade displacement effects of food aid contributed to the collapse of WTO negotiations in Cancun last September. The root of these various problems commonly associated with food aid originate ultimately in targeting errors, through leakage to unintended beneficiaries and the inadvertent exclusion of food insecure peoples (Barrett 2002, Barrett and Maxwell forthcoming).

The ultimate efficacy of targeting in reducing food insecurity and poverty – and in avoiding undesirable side effects such as dependency, producer price disincentive effects or trade displacement – depends not only on the direct distribution of transfers, however, but also on any induced changes in private transfers between households. Anecdotal evidence from northern Kenya (e.g., Aklilu and Wekesa 2001) suggests that social safety nets, in the form of transfers between relatives and neighbors, act as an important coping mechanism for households. Our data confirm this. During the survey period, over 65 percent of northern Kenyan households surveyed report making transfers of money, livestock, or uncooked food. Nearly 30 percent of southern Ethiopian households report

similar transfers. Neither figure includes interhousehold loans.

The suitability of food aid and private transfers may depend on the nature of the shocks experienced by households. External transfers into a community are necessary to help weather community-level, covariate shocks, such as drought, human or livestock disease epidemics, or generalized crop failures. By contrast, informal social safety nets within communities are theoretically better suited to addressing household-level, idiosyncratic shocks not experienced broadly throughout the location. Because severe shocks common to all households can overwhelm local informal insurance networks, food aid and other public transfers are typically most effective in response to community-wide shocks. Meanwhile, because local residents typically have better information about household-level shocks than do external agencies, informal, intra-community transfers are generally more effective in addressing idiosyncratic shocks. Therefore, we investigate whether food aid and private transfers differ by the type (household-level versus community-level) of shocks experienced.

We use household-level survey data the PARIMA project collected quarterly, March 2000 – December 2001, during the peak of and recovery from the serious 2000-1 drought, to explore how effectively food aid and private transfers reach poorer households in the arid and semi-arid regions of northern Kenya and southern Ethiopia. These countries also reflect two different targeting methods employed by international agencies. Those operating

in southern Ethiopia target recipient households through a range of traditional methods (e.g., queuing and food-for-work based on principles of self-targeting, indicator targeting based on the gender of the household head or the presence of children in the household, etc.). Meanwhile, in northern Kenya, food aid distribution has switched to community-based targeting, wherein outside agencies eschew household-level targeting, which is decided entirely by the recipient community. These communities have consistently opted for ostensibly uniform distributions, with each household entitled to an identical ration (per person or per household, depending on the community).

### Major Preliminary Findings

Our first major finding concerns the extent to which pastoralist households depend on food aid receipts. Contrary to widespread concerns about food aid dependency, we find that although many pastoralist households receive aid, the quantity received comprises only a small portion of total income for most households. In northern Kenya, 89 percent of the households surveyed received food aid. In southern Ethiopia, only 54 percent of households received food aid. This difference plainly reflects the use of community-based targeting in Kenya but not in Ethiopia. Nonetheless, food aid comprised 11 percent or less of income for half the Kenyan households during the drought crisis, and only represented half or more of income for 17 and 21 percent of Kenyan and Ethiopian households, respectively (Figure 1). Only about one-third of southern Ethiopian pastoralist households derived more than one quarter of their income from food aid, as did only 30% of Kenyan pastoralist households. These amounts seem modest indeed among very poor populations experiencing a severe drought.

Not only were Kenyan pastoralist households more likely to receive food aid during and following the 2000-1 drought, they also received more of it than did Ethiopian pastoralists. Daily per capita food aid values were meager in both places, less than \$0.03 per person per day, on average, in Kenya and less than half as much in Ethiopia. Consistent with the indicator targeting widely employed in Ethiopia, household demographics also played a major role in food aid receipt patterns. As Figure 2 shows, the value of food aid received per day per capita varies markedly with the age and gender of the household head. In both Ethiopia and Kenya, households with older female heads receive significantly more food aid than those with male or male heads.

Our second major finding concerns the responsiveness of food aid and private transfers to covariate and idiosyncratic shocks. Food aid flows do not respond significantly to either household-level or community shocks to either income or assets. Although there appears to be some inertia in food aid distribution – communities which received aid last quarter have a slightly higher probability of receiving aid this quarter – food aid also flows in response to drought. As the amount of rain received decreases, food aid receipts increase. In other words, during times of drought, households did receive more food aid. A 200 millimeter decrease in rainfall over the quarter results, on average, in each recipient household receiving an estimated \$0.01 per person per day additional in food aid. Although food aid offers meager compensation for losses, it at least flows roughly in response to community-level need during drought. Direct food aid distribution is nonetheless poorly targeted at the household level.

Although food aid does not respond to idiosyncratic or covariate shocks faced by households, private intra-

community transfers do respond to household-level shocks, albeit still in only very modest quantities. For example, a household-level asset shock equivalent to losing one TLU leads to an estimated \$0.25 increase in total private transfers of cash, livestock, maize, milk, and sugar received from other households over the course of three months. Private transfers are nonetheless substantially smaller than food aid receipts, as shown in Figure 3. Male-headed households in Ethiopia tend to give transfers, while female-headed households tend to receive them. In Kenya, all of our stylized households received transfers from other households, reflecting the greater role played in Kenya by remittances from family members who have moved to towns.

Figure 1. Food aid receipts as a share of pastoralist household income, 2000-1 drought

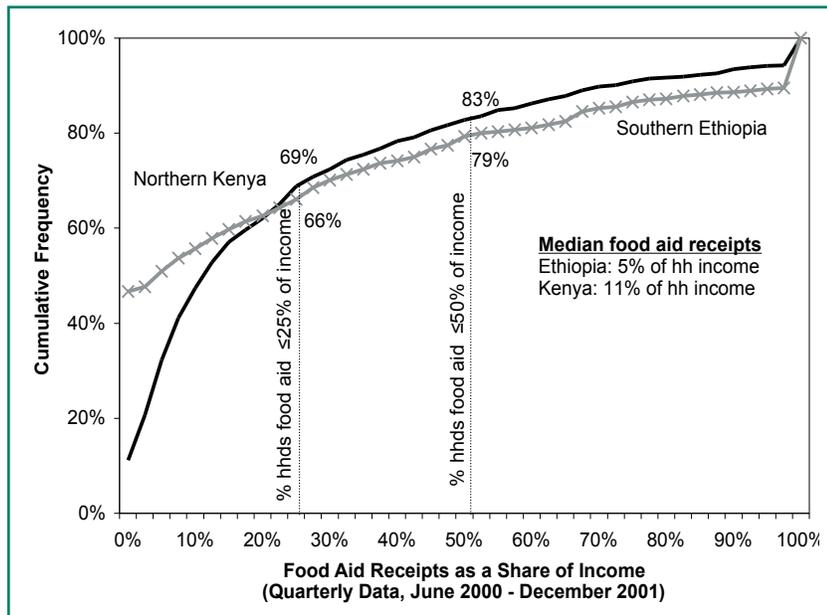


Figure 2. Value of food aid per capita per day by household types for households who received US dollars.

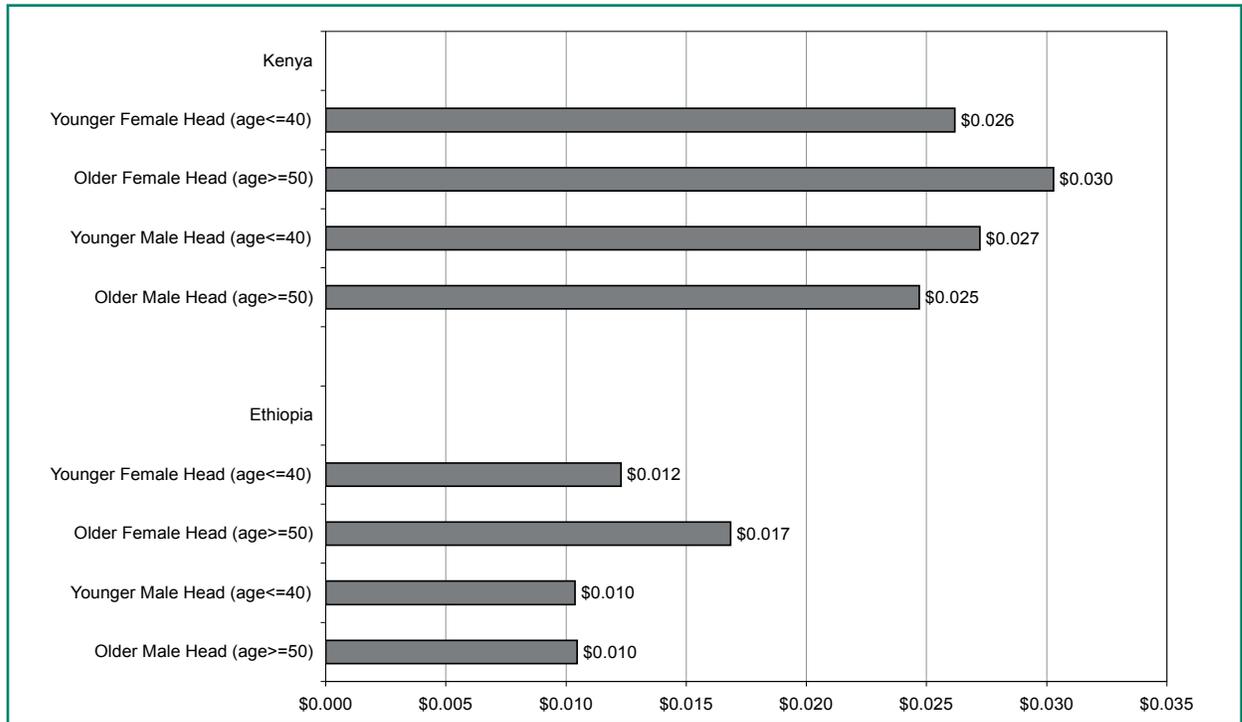
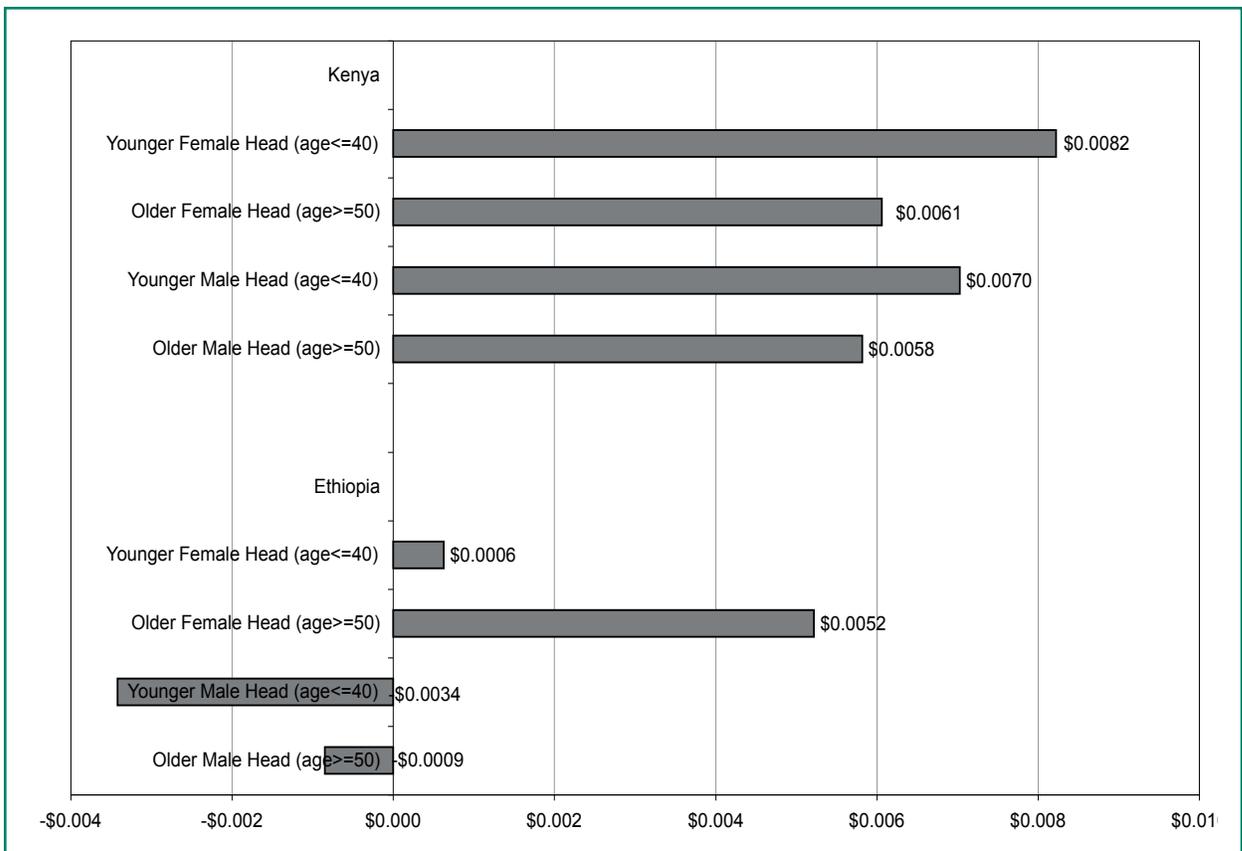


Figure 3. Value of net private transfers per day per capita per household types where net private transfers are inflows minus outflows.



Our third major result concerns the impact of food aid on private transfer patterns. Households' intra-community transfer patterns do not appear impacted by community-level shocks nor by food aid receipts. Food aid, then, does not appear to "crowd out" private transfers. Nor is food aid, in the form of uncooked food, indirectly targeted in the sense that subsequent, private transfers correct the initial household-level targeting errors associated with community-based food aid targeting. So the hypothesis that in the absence of formal targeting by external food aid providers, households endogenously redistribute food aid to the most needy members of a community appears false.

Overall, these results indicate that food aid does not appear to be well targeted to individual households, and is subject to inertia in distribution. Further, food aid flows do not respond to community-wide asset or income shocks, only to rainfall shocks regardless of their impact on pastoralist welfare. The volumes of food aid distributed remain modest for all but a small number of households. Private transfers respond modestly to household-level, idiosyncratic shocks, thereby addressing some of the failure of food aid to reach households and communities in shock. Yet private transfers are even smaller in volume than food aid flows to pastoralist households. In short, there is no effective safety net in place for pastoralists in this region.

### Further Reading

Aklilu, Y. and M. Wekesa. 2001. "Livestock and Livelihoods in Emergencies: Lessons Learnt from the 1999-2001 Emergency Response in the Pastoral Sector in Kenya" OAU-IBAR, Feinstein International Famine Centre, Tufts University, Medford MA. ([http://famine.tufts.edu/pdf/working\\_paper\\_3.pdf](http://famine.tufts.edu/pdf/working_paper_3.pdf))

Barrett, C.B. 2002. "Food Aid Effectiveness: 'It's The Targeting, Stupid!'" report to the Policy Service, Strategy and Policy Division, World Food Programme. ([http://aem.cornell.edu/faculty\\_sites/cbb2/Papers/WFPPaperDec2002.pdf](http://aem.cornell.edu/faculty_sites/cbb2/Papers/WFPPaperDec2002.pdf))

Barrett, C.B. and D.G. Maxwell. Forthcoming. *Food Aid After Fifty Years: Recasting Its Role*. London: Routledge.

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*About the Authors:* Erin Lentz is a graduate student in Applied Economics and Management at Cornell University. She can be contacted at Warren Hall, Cornell University, Ithaca NY, 14853-7801. Email: [ECL4@cornell.edu](mailto:ECL4@cornell.edu). Chris Barrett is International Professor of Applied Economics and Management at Cornell University, Ithaca, NY 14853-7801 USA, email: [cbb2@cornell.edu](mailto:cbb2@cornell.edu)

The GL-CRSP Pastoral Risk Management Project (PARIMA) was established in 1997 and conducts research, training, and outreach in an effort to improve welfare of pastoral and agro-pastoral peoples with a focus on northern Kenya and southern Ethiopia. The project is led by Dr. D. Layne Coppock, Utah State University, Email contact: [lcoppock@cc.usu.edu](mailto:lcoppock@cc.usu.edu).

### Practical Implications

This brief offers the first known survey-based evidence on food aid and private transfers to pastoralist households in the rangelands of east Africa. A solid understanding of how well food aid is targeted according to household need and the shocks they experience, and how households subsequently adjust – or don't adjust – private interhousehold transfers in response to food aid flows, is essential to helping policymakers, donors and international NGOs make best use of limited resources while minimizing the risks of adverse effects associated with dependency, producer price disincentives or trade displacement.

Overall, food aid contributes a relatively minor share of pastoralist households' income. While it is not well targeted to individual households and does not respond appropriately to community-level, covariate asset shocks such as livestock losses, it does not appear to disrupt private transfer systems, although these provide poor households even less insurance against shocks than food aid does. On balance, transfers of any sort, whether from other households or from external agencies providing food aid, appear to play only a modest role in the pastoral regions of northern Kenya and southern Ethiopia, even in the midst and aftermath of a major drought.



The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in East Africa, Central Asia and Latin America.

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