Appendix D
Drought Mitigation Projects, Ethiopia and Kenya

Kenya Arid Lands Management Project\textsuperscript{62}

Since 1996, the World Bank has funded a sequence of projects under the Arid Lands Resource Management Project (ALRMP).\textsuperscript{63} Phase 1 (1996–2003) was motivated by vulnerability and resource degradation resulting from overstocking of cattle and repeated droughts. An IEG evaluation found that the project succeeded in improving drought monitoring and response. Time between reported stress and response was reduced to 2 to 3 weeks, and interventions saved lives and reduced livestock mortality. Better markets for pastoralists reduced overgrazing near water points, allowing herders to sell stock in good condition. Benefit/cost ratios for livestock activities were estimated to be between 2 and 8. ALRMP II (2003-11) continued the program, with increased coverage into some semi-arid areas.

The experiences and lessons from ALRMP have been informed development of the national drought management system, starting at the district level. An important focus of ALRMP was the development of drought preparedness and contingency plans at the district level, complemented in some cases by plans for natural resource management. Effective drought management and response involves a range of interrelated tasks of assembling information on climate and vulnerability to food insecurity, training staff to create, use, and apply this information, and fostering capacity for policy-making and implementation. District Steering Groups (DSGs) have been central in enhancing drought management actions, including improving drought coordination, reducing duplications, and improving response at the district level. In addition, ALRMP has had major influence on national policy and development agendas in the arid and semi-arid lands.\textsuperscript{64} The experiences and lessons from ALRMP have informed national drought management policy and response through the creation of a National Drought Management Authority (NDMA) and Drought Contingency Fund. And it has coordinated with other agencies, such as FEWSNET, in developing and disseminating drought management and early warning information.

Against these institutional successes, a forensic audit by the Bank’s Integrity Vice Presidency found evidence of serious shortcomings suggestive of systemic corruption. The audit found that 29 percent of sampled transactions were
questionable. The extent of such fiduciary issues remains a major challenge to addressing persistent food security and reducing livelihood vulnerability in Kenya.

In connection with the audit, the project was shut down prematurely, raising questions of sustainability. While ALRMP’s institutional advances appear to be robust, the abrupt cutoff in funding hampered responses to the 2010-11 drought. Agency responses suggested that the drought response in 2010-11 was less effective and timely than those in previous years, in part, due to the absence of funding for the Drought Contingency Plan. Consequently, critical drought mitigation interventions, such as emergency livestock marketing, were either late or not implemented at all.

The International Livestock Research Institute (ILRI) assessed the impact of ALRMP II based on extensive surveys and statistical analysis (Johnson and Wambile 2011). It found significant institutional contributions, but only weak evidence of impacts on livelihoods and resilience, as follows:

- **Number of people needing food aid**: The analysis found a small but negative and statistically significant correlation between cumulative ALRMP expenditure and the percent of people needing food aid in the arid districts. The correlation between ALRMPII expenditure and the percent of people needing food aid was not significant in semiarid districts.65
- **Emergency response to drought**: The time that agencies took between becoming aware of an emergency and responding dropped by 1.5 weeks (16 percent) during the time that ALRMP was operational.
- **Impacts on child nutritional status**: Using a very large sample, one analysis found a modest increase in nutritional status in areas benefiting from ALRMP.66 No gender analysis was performed.
- **Access to social services**: There was no significant difference between intervened and control areas.
- **Institutional impact**: Thirty-five percent of community representatives report more empowerment. Various respondents reported significant contributions to national policy development.

**Ethiopia Productive Safety Nets Program**

The Ethiopia PSNP is now in its third phase. The program was designed to transform Ethiopia’s safety net system externally and internally. The starting point was a reactive system, funded by emergency appeals to donors, that used food transfers for drought relief. The system transitioned to a multiyear prefinanced system that set aside contingency funds for years of severe drought. Drought relief
took the form of payments for labor on community-identified public works intended to build up resilience to future droughts. Additional funds were provided as direct support to especially vulnerable households.

The PSNP has been the subject of rigorous impact evaluation by the International Food Policy Research Institute (IFPRI), with a panel of households surveyed every two years. Studies (Berhane, Hoddinott and others 2011a) found that participants in the public works component of the PSNP experienced 1.5 fewer food-insecure months than nonparticipants in areas not affected by drought. In drought-affected areas, the reduction was 0.93 months. (The evaluation was not able to detect an impact on caloric intake, perhaps for technical reasons.) In both areas, participation in the public works component increased animal holdings by 0.4 tropical livestock units. Direct support payments to households unable to supply labor, also reduced food insecurity. The evaluation found that public works participants who also received extension and credit services were more likely to invest in stone terracing (a soil conservation measure) and fertilizer, boosting their yields.

IFPRI also evaluated the implementation and institutional performance of the system. The system is improving over time, but there are shortcomings. Budgets are not adequate to meet the needs of all eligible people, so rationing takes place. The early warning system is improving, but most districts are not able to use it for effective contingency planning. The payment cycle takes 39 days on average, with wide variations between districts. Women are well represented on subdistrict committees, but work allocation does not take account of women’s greater domestic time obligations or differentiate on the basis of ability to perform heavy physical labor. Implementation challenges have been greatest in lowland regions populated by pastoralists (Berhane, Hoddinott and others 2011b).