# Collective Action and Informal Institutions: The Case of Agropastoralists of Eastern Ethiopia.

Fekadu Beyene

#### Introduction

Recurrent droughts and a falling water table have led to increasing scarcity of water for crop farming and livestock watering among agropastoralists of Mieso in Eastern Ethiopia. The increasing pressure on water resources and livestock watering points is threatening traditional norms that govern access rights to water. Livelihoods, which are heavily dependent on water, are largely disrupted and subject to an increasing degree of vulnerability.

To address this issue, in 2002 the regional government introduced water harvesting projects in Mieso in order to minimize the disastrous effects of drought and reduce food insecurity. Part of a broader national program, the idea was to harvest rainwater in ponds constructed and managed by organized groups. Supporting collective action efforts at the grass roots level was an explicit policy mechanism that sought to enable the poor to achieve common goals that could not be achieved individually due to capacity constraints or coordination problems.

The research summarized in this brief examines the groups formed to harvest water collectively and maintain water wells among agropastoralists of Mieso in Eastern Ethiopia. While studies on collective action have so far been extensively undertaken among smallholder sedentary farmers in the highlands, this study introduces a novel perspective by focusing on semi-sedentary agropastoralists.

The data underlying this study was generated from in-depth interviews with various stakeholders at the community level, in several focus group discussions and in individual interviews with 80 households randomly selected in 4 peasant associations from November 2004 through April 2005.

#### **Structure of Collective Action**

The evidence points to two distinct types of collective action institutions that capture the key differences in their organization: 1) internal or self-organized groups, and 2) externally initiated and facilitated groups. This demarcation, defined by organizing influence, also differentiates against several other key group characteristics. The type of water management scheme the groups were involved in defines one such clear difference. Water-well maintenance was exclusively pursued by self-organized groups, largely because the practice was well established within the communities and traditional rules existed that required collective decision-making to enforce these rules. Water harvesting, on the other hand, being a local government program, required external facilitation. The

nature of sanctioning and rule enforcement also differs between self-organized and externally initiated schemes. While peer influence and the threat of temporary exclusion from access is the customary practice for water-well management, monitoring by chiefs and the possibility of fines are the mode of enforcement for water harvesting.

## Participation and membership

Differences in the access rights to water wells and water harvesting ponds have important implications for the effectiveness and sustainability of collective management. Water harvesting essentially entails a collective effort to harvest water for the private use of particular members who can thereafter claim ownership of the water – joint production but private appropriation. Water is harvested for each group member on his own farm in a rotating fashion. Those members who fail to contribute labor will be excluded from membership and the mechanism of minimizing free riders is simple. In this type of collective scheme, cooperation is self-enforcing because the institutional arrangements operate on reciprocity basis.

Because the water points remain a common property resource, the collective management of water wells relies on the strength of community norms. While the rules governing water well management have historically been effective, recurrent drought shocks and longer migration paths in search of available grazing far away from place of residence has eroded the effectiveness of informal management. Because the wells are essentially a common resource, moral hazards (where the leader hardly monitors contributions to the maintenance) have given way to free-riding. In some instances, the breakdown of informal authority, predicated by increased resource scarcity and vulnerability, have resulted in the neglect and consequent drying-up of several wells.

### **Conclusion/Policy Implications**

This study examined the way in which agropastoralists of Eastern Ethiopia organized the collective management of water resources. The authors highlight how differences in the production and access rights of water wells and water harvesting ponds critically determine the effectiveness of collective management efforts. The fact that harvested water, though jointly produced, is privately controlled and allocated means that informal organizations can rely on the threat of exclusion to discourage free-riding. As water wells are common property, access rules based on traditionally accepted practice, or informal community control, are less effective in the face of prolonged stress where the strength of cultural norms are trumped by the imperative of survival. Poor techniques of water harvesting and storing, inadequate extension services, and the random grouping of members, on the other hand, impede water harvesting.

Development programs and intervening agencies facilitating collective action in such societies must thus be very sensitive to the interaction of cultural and economic factors governing collective action. Mechanisms to adjudicate conflicting claims to traditional water sources need to be put in place. At the same time, water harvesting schemes need

the regular support of technical experts in order to be more efficient and to mitigate instances of food insecurity resulting from water scarcity.

Download full paper