Working with Communities and Building Local Institutions for Sustainable Land Management in the Ethiopian Highlands

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Land management is a multi-dimensional and multi-institutional engagement that demands collective analysis, design, and implementation of innovations. Its importance for Ethiopia cannot be overemphasized, as land degradation threatens food security and environmental sustainability. Building on a specific case study of a project in Southern Ethiopia, the present article describes how the government and non-state agencies are collaborating to learn together while promoting improved land management practices and implementing land rehabilitation programs in communal areas and farmlands in the Ethiopian highlands. Ensuring full involvement and commitment of stakeholders at different levels, building the capacity of local institutions, and redefining the role of communities and the state in a dynamic way are essential prerequisites for success. Suggestions have also been formulated to facilitate wider adoption and scaling up of improved land management innovations.

Land degradation in the Ethiopian highlands

Status and mitigation measures

In Ethiopia an estimated 17% of the potential annual agricultural GDP of the country is lost because of physical and biological soil degradation. Presenting the cost of soil and land degradation in terms of loss of productivity and/or cost of fertilizers and other resources, rather than describing it in terms of the extent of soil loss per hectare per annum, could help win the attention of policymakers (Figure 1). Poor economic strategies by successive governments relating to urbanization and industrialization, and restrictive policies on outmigration and immigration have forced farmers to remain in their place of origin, which has aggravated over-exploitation of available land resources. The drought and subsequent famines of the 1970s forced the Ethiopian government and donors to engage in afforestation and soil and water conservation measures, primarily through food aid. Farmers were given food aid based on the size of the terraces they constructed and the number of trees they planted on communal lands. Many terraced areas were soon destroyed, and the survival rates of trees were extremely low; estimates of survival one year after planting were as low as 0–15%. Part of the problem is associated with tenure insecurity that resulted in use of the land rather than investments on it, and the top-down nature of the approach employed. Government policies in the 1980s also created a false dichotomy of dividing the country into 'high-potential' and 'low-potential' areas. Many land management investments were conducted on already degraded sites in so-called low-potential areas. This inadvertently made meaningful investments in sustainable land management (SLM) impossible in high-potential areas, where land degradation continues unabated.

The role of local institutions in promoting sustainable land management

The interest of the current Ethiopian Government in tackling poverty and promoting SLM is not supported by comprehensive policies and effective institutions. Secure tenure and clear property rights regimes are needed to convince farmers to invest in land management practices. Improving tenure security and promoting decentralization to lower levels to administer resources has been the official position of the government. But translating

FIGURE 1 Land degradation in the Ethiopian highlands is a major source of concern in a country heavily dependent on agricultural land. (Photo by Tilahun Amede)

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FIGURE 2 State of Food for Work terraces after about 10 years in central Ethiopia: farmers have adapted the measures to their needs. The top-down nature of FFW and the lack of involvement by farmers in the planning and implementation stages of the process are likely to be the root causes of drawbacks in this approach. (Photo by Karl Herweg)

this into practice and using it to promote SLM requires working with communities, building the capacities of local institutions, and devising mechanisms to ensure that SLM also eventually offers economic benefits for households.

At the community level, different institutional arrangements are observed in Ethiopia in implementing SLM practices. In some cases institutions are organized at the community level, while in many other cases lower-level official administrative structures are used. Traditional leaders also establish themselves as important stakeholders in community-level undertakings. The assumption behind the various lower-level informal or formal institutions is that they will facilitate active involvement of communities in managing resources. Such institutions should also help minimize transaction costs, control the opportunistic behavior of some members of the community, and enhance the capacity of farmers to adapt to major drivers of change such as population pressure, climatic change, and market signals.

The questions that must be addressed in this respect are: 1) What is the extent (scale and scope of involvement) of local institutions in natural resource management (NRM)? 2) How can the effectiveness of these institutions be enhanced to promote decentralized NRM for better livelihoods and conservation outcomes? 3) How should the role of the state agency change to empower local institutions to sustain and expand efforts in SLM? The following sections attempt to address these questions by reviewing the historical development of land rehabilitation efforts in Ethiopia, with emphasis on a specific project as a case study.

The MERET Project

Terraces built and trees planted through Food for Work (FFW) programs were largely failures (Figure 2). The need to involve communities, work with community-level institutions, and create opportunities for learning together about effecting desirable change was agreed on by both the World Food Program (WFP) and the Government of Ethiopia. Accordingly, by the end of the 1980s, the Ministry of Agriculture and WFP designed a land rehabilitation project, Project ETH 2488, which became MERET (Managing Environmental Resources to Enable Transitions to more sustainable livelihoods) in 2003. This project marked the beginning of large-scale soil and water conservation programs linked to watershed management in the country. MERET has a major FFW component covering more than 750 communities and 600 watersheds in 74 food insecure districts.

The focus of MERET has changed from larger watersheds to smaller watersheds, and from instruction to community participation and enhancing the capacity of local institutions. This was made possible through the use of an evolving Local Level Participatory Planning Approach (LLPPA). The successful experience of MERET in land rehabilitation is described in a specific case study from the Blate Watershed in Alaba District in Southern Ethiopia.

Planning and implementation in the Blate Watershed

Alaba District is located in the Great Rift Valley of Ethiopia, about 310 km south of Addis Abeba. It is a drought-prone and highly degraded area that receives about 800 mm of very erratic rainfall. The

MERET project in Alaba began in 1995 by adapting experience garnered elsewhere in the country. Local community earnings in the district for fodder grass and eucalyptus trees from degraded lands that were reclaimed and properly managed totaled about 95,000 Birr (about 11,000 US$) in 2005. They used the money to pay taxes, maintain local infrastructure, and repair schools. In some project areas degraded communal hillsides were distributed among communities with well-designed management directions; the results today are remarkable. MERET followed the following steps in planning and implementation of SLM practices in the Blate Watershed:

- **Selection and prioritization of watersheds:** a multidisciplinary district-level watershed management team, composed of experts of the District Office of Agriculture and WFP, was established to select priority watersheds, support the local-level planning process, and provide technical backstopping during the implementation stage. The selected sub-watersheds and planned activities were presented to the district council for approval.
- **Engaging local officials and negotiating with the community:** the district-level team made reconnaissance visits to the selected watersheds and held talks with *kebele*-level authorities (lowest administrative unit) and community leaders to introduce and explain watershed management principles and what is likely to be done in the selected watershed, and agree on next steps (Figure 3).
- **Inventory assessment and constraint and opportunity analyses:** participatory analysis was conducted on the resource profile of the area, major system opportunities, and constraints at farm, watershed, and higher levels.
- **Developing base and development maps:** based on the information collected, the community-level base map was developed, describing the current status and presenting a development map that illustrates intervention sites in relation to the desired land use types. Communities discussed and approved these maps as instruments to guide future

FIGURE 3 District officers and community members discussing the rehabilitation of degraded land in the Gununo Watershed. (Photo by Tilahun Amede)

intervention (Figure 4).
- **Identification and prioritization of innovations:** based on the previous 2 steps, the planning team identified and prioritized innovations to be introduced in the watershed.
- **Review and approval of the plan:** the team proposal was presented to the communities and stakeholders concerned, who made the necessary changes and approved it for submission. The plan was then sent to the district watershed team for final approval.
- **Implementation:** stakeholders at all levels implemented the plan. Regional and district officials mobilized resources, organized training and other support, such as focused study tours to facilitate successful implementation of the plan. At the local level communities used their indigenous knowledge and institutions to mobilize collective action and ensure equitable responsibility and benefit sharing.
- **Participatory monitoring and evaluation:** this is an essential component of the MERET project. Participating communities take part in the monitoring and evaluation process. They jointly

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FIGURE 4 Community members drawing a base map for landscape rehabilitation in Alaba District, assisted by district officers. (Photo by Tilahun Amede)

investigate how the plan is being implemented, whether changes are needed, expected results are still realistic, and whether new alternatives have become available. These reflections are integrated while planning the next cycle.

Going through this process created opportunities for institutional and individual learning. The experience was used to refine the processes and apply them when initiating new MERET projects in other districts.

Local-level policies that facilitated the implementation of the MERET project

The success of the MERET project in the Blate Watershed Three was made possible thanks to 3 local but related policies: 1) the use of FFW resources for SLM practices (the shift from free delivery to development-oriented tasks); 2) the agreement reached by the communities to control free grazing; and 3) the equitable responsibility and benefit sharing arrangements adopted by the communities (working in teams and sub-teams to rehabilitate land and protect rehabilitated areas from grazing, and sharing benefits such as fodder grass during the dry season). These policies were mediated by existing institutions and norms.

Communities also developed new rules and regulations to ensure successful implementation of agreed upon activities, ie incremental sanctions when peo-

ple do not show up on collective working days in the watersheds or when grazing occurs in the exclusion zone; failure to abide by commonly agreed terms can result in social exclusion. However, these norms and rules are still informal and not legally binding. Thus, they can hardly apply to free raiders coming from outside the community. There is a need to devise mechanisms to provide legal recognition of such commonly agreed rules and regulations.

Sustaining and promoting adoption of SLM practices

Based on closer examination of the MERET project in Alaba District, the following measures have been suggested to facilitate wider adoption and scaling up of SLM practices.

- **Legal and institutional support:** in Alaba District we observed that despite the effective role of local institutions in controlling free movement of livestock, ensuring area closures, and sharing benefits, the agreements and arrangements are informal and not legally binding. Clarifying and enforcing rights and responsibilities of all stakeholders is essential. A good policy environment and legal framework facilitates enforcement mechanisms with gradual sanction mechanisms. Thus, legally recognizing local institutions, endorsing their bylaws, creating tenure security, and respecting property rights are essential elements to encourage investment in sustainable natural resource management.
- **Identification of appropriate interventions:** it is important to identify and introduce technological and institutional innovations for SLM that increase the capacity of land users to adapt to major drivers of change. Farmers should also be given a basket of options to choose from, and adapt those that best fit their circumstances. Interventions should be designed to complement farmers' processes of innovation, and options must be remunerative to land users in the short term.

FIGURE 5 Reclaimed land after implementation of a participatory GTZ project featuring soil and water conservation and biological measures in Gonder, Northern Ethiopia; gully erosion has been halted by vegetation. (Photo courtesy of GTZ–IFSP South Gonder)

May 2003

October 2005

- **Redefining the role of the state in a dynamic way:** the role of the state should evolve from an authoritarian policing body protecting natural resources to an agency that arbitrates and supports stakeholders to help them use their resources in a sustainable way. The first step is managing conflicts by identifying parties, and determining their rights and responsibilities. Identifying common interests and capitalizing on them to build effective linkages is important. It is also important to make sure that elites do not capture benefits and marginalize the poor. Thus, building systems of accountability and institutional transparency at the local level is also necessary to promote sustainable land management practices in the Ethiopian highlands.

Conclusion

Land degradation has become a major concern of the Ethiopian farmers. The MERET project has drawn on the lessons of previous failures. It now involves communities and uses local-level participatory planning. The experience of the MERET project illustrates the need for active engagement of communities in the planning and implementation of land rehabilitation measures (Figure 5), and the importance of assisting them in building on their own institutions to formulate and implement relevant bylaws.

Developing incentive systems and integrating income-generating strategies into natural resource management practices are necessary to maintain commitment. It is important that policymakers also be informed about the policy and legal support needed while identifying and implementing possible solutions to address land degradation and other common landscape problems. The local bylaws for resource arrangement and use should be legally supported. Indigenous institutions and influential people such as elders and religious or traditional leaders must be actively engaged in the formulation, legalization and enforcement of these rules and regulations. Coherent national and local policies, effective local institutions, and a strong legal framework are needed to actively engage communities and guide them towards collective action to promote SLM practices in the Ethiopian highlands. It is also important to promote the integration of social, biophysical, and policy components at a watershed or landscape level. The resulting changes should be monitored and the processes and outcomes properly documented for facilitating wider adoption.

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FURTHER READING

Ashley R, Russell D, Swallow B. 2006. The policy terrain in protected area landscapes: Challenges for agroforestry in integrated landscape conservation. *Biodiversity and Conservation* 15(2):663–689.
Campbell B, Shackleton S. 2002. Organizing for community-based natural resources management. *Zimbabwe Science News* 36(1/2):5–12.
Gete Zeleke. 2005. *Experiences on Integrated Watershed Management in Ethiopia: The Case of MERET Project.* Addis Abeba, Ethiopia: Eastern Nile Technical Regional Office (ENTRO).

Gete Zeleke, Hurni H. 2001. Implications of land use and land cover dynamics for mountain resource degradation in the north-western Ethiopian highlands. *Mountain Research and Development* 21(2):184–191.
Melaku B. 2003. *Forestry Property Rights, the Role of the State and Institutional Exigency: The Ethiopian Experience* [PhD dissertation]. Uppsala, Sweden: Department of Rural Development Studies, Swedish University of Agricultural Sciences.
Webb P, von Braun J. 1994. *Famine and Food Security in Ethiopia: Lessons for Africa.* New York: John Wiley and Sons.