

Soil and Water Conservation through Attitude Change and Negotiation

Awareness creation, negotiation support and by-laws can enable emergence of voluntary forms of collective action on soil and water conservation where this was previously considered impossible.

Extensive outfield areas in highland Ethiopia are underutilized and highly degraded. While household landholdings are some of the highest in eastern Africa, yield and soil fertility levels are extremely low. Causes include the effect of repeated land reforms and public land tenure on perceived tenure security (and willingness to invest); a free grazing system that threatens perennial vegetation and conservation structures; and increased use of dung for fuel, diverting valuable nutrient resources from agricultural fields. Adoption of soil and water conservation measures is negligible due to farmers' unwillingness to invest in activities with medium- and long-term benefits and the perception that outfield investments are made impossible by the free grazing system. Small landholdings and land fragmentation create additional challenges in constructing waterways to drain excess water from the landscape, because these structures must cross multiple plots of different landowners.

The approach used to support soil and water conservation by extension and development actors is top-down, based on quotas for soil and water conservation structures at diverse administrative levels. Soil and water conservation is done either on an individual



Plate 1. Landscapes of Galessa and Konso: awareness creation through cross-site visits.



basis, or on a collective basis through imposition by the government. Voluntary engagement through awareness creation and collective decision-making is lacking in current strategies. This brief describes efforts to mobilize collective action in soil and water conservation through bottom-up awareness creation and negotiation support.

Attitude Change: Seeing Is Believing

During preliminary discussions with watershed residents on collective action in soil and water conservation, farmers stated that collective action on a voluntary basis “is impossible.” Multiple alternatives were discussed, including fencing of small outfield areas, gradual reductions in the free grazing area, and protection of new conservation structures (through policing or other measures), but farmers refused. In an effort to create awareness of what is possible in outfield areas, cross-site visits were carried out to a region in southern Ethiopia (Konso) where indigenous soil and water conservation practices are common and outfields are intensified (Plate 1). This had a profound effect on farmers’ awareness of what is possible. As stated by one farmer, “If I had not been to this place, I would not believe human beings can construct terraces across the whole Woreda in such an artistic manner.”



Plate 2. Farmers at Ginchi site observe sediments trapped by soil bunds.

Empirical research can also facilitate attitude change by making visible biophysical processes that are otherwise difficult to observe. An experiment in Galessa on plots with and without soil bunds helped to illustrate to farmers what is lost from their fields and what is retained as a result of conservation structures (Plate 2).

Negotiation Support to Mobilize Voluntary Collective Action

Negotiation support processes began at watershed level involving all households to explore different scenarios and select one “best bet” scenario based on the interests of different local stakeholder groups. Interest groups included farmers residing and grazing their livestock in the watershed but having no land in the watershed; farmers residing outside the watershed but having land in the watershed; farmers with both land and livestock in the watershed; and elders and youth—due to highly divergent landholdings. Scenarios that were considered included: (i) no investment; (ii) fenced outfield areas to protect conservation structures for each household; (iii) organize groups of farmers and hire a guard to keep livestock away from structures; and (iv) temporary restrictions on livestock move-

ment in a small area while the adjacent areas receive grazing livestock of all households (for gradual scaling out). An agreement was reached to try the last scenario, and by-laws developed to restrict the areas where livestock can graze. This was followed up by village-level negotiations to identify locations of common waterways and to develop detailed plans for implementation. While youth originally refused to invest due to the landlessness, these negotiations successfully convinced them of the ultimate benefits accruing to

them as a result of increased fertility in areas they would contract from landowners. The effectiveness of this solution is not yet determined because crops are still in the field and grazing is confined to restricted areas by tradition during this cropping season. However, the attitude change toward soil conservation and collective action is remarkable.

Conclusion and Recommendations

Outfield intensification in the Ethiopian highlands is extremely complex. Basic ingredients to voluntary intensification processes include awareness creation, negotiation support and continuous follow-up monitoring to adjust strategies as they are implemented. Strategies to integrate market incentives into outfield intensification strategies (i.e. high-value trees and crops suited to these areas) should also be explored. While proven technologies were distributed to participating households, strategies to link such incentives explicitly to the outfields need to be explored.

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