



The problem with gullies at Debre Yakob Watershed (photo: Wolde Mekuria Bori, IWMI).

Sustainable approaches to degraded land restoration in rural Ethiopia

The challenge

Land in the Ethiopian Highlands is facing intense degradation. This often leads to loss of biodiversity and a reduction in services derived from ecosystems. A number of initiatives have been put in place by the Government of Ethiopia and others to restore degraded ecosystems. However, the biggest challenge is to ensure that such interventions are sustainable.

Aims

Researchers from the International Water Management Institute (IWMI), in collaboration with local partners, are working to identify incentives that can support farmers in adopting long-term conservation

approaches. The project will also assess the benefits and trade-offs of these interventions, and share the findings with policymakers.

This two-year (2015-2016) project titled '*Sustaining land management interventions through integrating income generating activities, addressing local concerns and increasing women's participation*' is part of the CGIAR Research Program on Water, Land and Ecosystems (WLE). The project aims to assess the sustainability of natural resource management (NRM) interventions and enhance ecosystem services (ES) through the restoration of degraded ecosystems. It also aims to support economic growth through enhancing ecosystem productivity.

Approaches

IWMI's approach is based on the premise that increasing the productivity of degraded ecosystems through sustaining NRM interventions will result in an increase in the following ES:

- Provisioning services – products obtained from ecosystems (livestock feed and human food).
- Regulating services – benefits obtained from the regulation of ecosystem processes (above- and below-ground carbon sequestration, and soil erosion control).
- Supporting services – services that are necessary for the production of all other ecosystem services (soil nutrient cycling through vegetation restoration).
- Cultural services – non-material benefits obtained from ecosystems (spiritual

enrichment, intellectual development, recreation, tourism and aesthetic values).

This project will use ecosystem-based approaches to guide the restoration of degraded ecosystems, improve ES and reduce biodiversity losses. A gender-based approach will be integrated throughout by collecting and analyzing gender-disaggregated data on the impacts of the interventions, incentives needed and concerns of the local communities. Ultimately, the project aims to strengthen the decision-making power of women and landless youth by providing training on improved agricultural practices, and improving income and livelihood diversification. An innovative aspect of this approach is that it integrates development practices and action research to develop strategies for both sustaining NRM interventions and increasing ecosystem productivity.



Land degradation in the Ethiopian Highlands (photo: Desalegne Tadesse).



Shigez sub-watershed in Adama, Ethiopia (photo: Wolde Mekuria Bori, IWMI).

Expected outcomes

Research outcomes

- Key stakeholders understand the requirements and incentives needed to enhance ES through sustained NRM interventions in at least 10 watersheds in the Ethiopian Highlands.
- Impacts of different NRM interventions are assessed in at least 10 watersheds.
- Three hundred households of landless youth and women (ca 150 female-headed households) have better options to diversify incomes and livelihoods in at least 10 watersheds, by testing different income-generating activities that are integrated with NRM interventions.
- Universities, research centers, communities and extension agents working in at least four watersheds better understand the options for gully rehabilitation and stabilization.

- District Gender Offices (DGOs) understand the techniques required to identify the different concerns of men and women in implementing NRM interventions, and ways to address their concerns.

Development outcomes

- Improved incomes and livelihoods of at least 1,500 households.
- Restored degraded ecosystems, and communities and the environment are more resilient to climate variability.
- Improved implementation of existing land resources management policies.
- Joint efforts between the government, nongovernmental organizations (NGOs) and communities are established to help address local community concerns and sustain NRM interventions.



Land degradation in the Ethiopian Highlands (photo: Desalegne Tadesse).

Project partners



Amhara Regional Agricultural
Research Institute (ARARI)



Bahir Dar University
(BDU)



Amhara National Regional
State Bureau of Agriculture
(BoA)

Further information

This leaflet has been produced by the International Water Management Institute (IWMI) (www.iwmi.org).

For more information on this project:

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Visit:

<https://wle.cgiar.org/project/n6-sustaining-land-management-interventions-through-integrating-income-generating-activities>

The CGIAR Research Program on Water, Land and Ecosystems (WLE) combines the resources of 11 CGIAR centers, the Food and Agriculture Organization of the United Nations (FAO) and numerous national, regional and international partners to provide an integrated approach to natural resource management research. WLE promotes a new approach to sustainable intensification in which a healthy functioning ecosystem is seen as a prerequisite to agricultural development, resilience of food systems and human well-being. This program is led by the International Water Management Institute (IWMI), a member of the CGIAR Consortium, and is supported by CGIAR, a global research partnership for a food-secure future. wle.cgiar.org

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