International Training on

Agroecological/Landscape Based Natural Resource Management in Ethiopia

Organized by
International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

under the aegis of
CGIAR CapSha Accelerator and Multi-Functional Landscape Science Program

28 to 31 July 2026
Arba Minch, Ethiopia

About the course:

Land degradation is one of the most critical environmental and development challenges facing Ethiopia and many countries across Sub-Saharan Africa. It adversely affects agricultural productivity, food security, water availability, biodiversity, and rural livelihoods. Population growth, changing land-use patterns, deforestation, overgrazing, unsustainable farming practices, and climate variability have accelerated the degradation of natural resources and reduced the capacity of landscapes to provide essential ecosystem services.

Over the past decades, large areas of forests, grasslands, and natural ecosystems have been converted into agricultural lands and settlements to meet growing demands for food and economic development. While these changes have supported agricultural expansion, they have also resulted in soil erosion, nutrient depletion, biodiversity loss, declining groundwater recharge, reduced soil moisture retention, and increased vulnerability to droughts and floods. The impacts are particularly severe in Ethiopia's rainfed and upland regions, where smallholder farmers depend heavily on natural resources for their livelihoods.

Degraded landscapes undermine agricultural productivity and contribute to poverty, food insecurity, malnutrition, and climate vulnerability. Limited access to productive land and water resources often compels rural households to seek alternative livelihoods, resulting in migration, labour shortages, and increased socio-economic pressures on communities. Climate change further exacerbates these challenges through rising temperatures, erratic rainfall, and frequent extreme weather events.

Agroecological and Landscape-Based Natural Resource Management (NRM) provides a holistic and sustainable solution to these interconnected challenges. By integrating soil and water conservation, agroforestry, biodiversity conservation, regenerative agriculture, and climate-smart farming practices, degraded landscapes can be restored into productive and resilient ecosystems. Such interventions improve groundwater recharge, soil moisture retention, vegetation cover, and ecosystem functions while creating opportunities for sustainable agricultural intensification.

Restored and well-managed landscapes enhance crop and livestock productivity, strengthen resilience to climate shocks, generate employment opportunities, and improve household incomes. Furthermore, scaling agroecological and landscape-based approaches supports Ethiopia's efforts toward land degradation neutrality, transformed agrifood systems, and contributes to multiple sustainable development goals. These approaches are increasingly recognized as essential pathways for building resilient agricultural systems and sustainable livelihoods.

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Mode of Evaluation:

The program is designed for researchers, extension professionals, government officials, project managers, policy makers, NGO practitioners, development partners, university faculty, watershed and natural resource management specialists, and private-sector representatives involved in agroecology and nature-based solutions, landscape restoration, climate resilience, and sustainable rural development.

Objectives of the course:

- To reorient a wide range of stakeholders on the landscape resource conservation approach for achieving land degradation neutrality and sustainable crop intensification
- To introduce the approach of landscape characterization, designing interventions and developing science-led living landscapes for strengthening rural livelihoods and eco-system services
- To discuss science-policy gap in natural resource management and developing strategies for scaling up.

Approach and methodology of training:

The training program will combine expert-led lectures, interactive discussions, hands-on exercises, and case studies. Participants will examine practical solutions for addressing land degradation, water scarcity, climate risks, and low agricultural productivity through integrated land-water-crop-tree-livestock management approaches. The program will promote knowledge exchange and peer learning by encouraging participants to share best practices. Special emphasis will be placed on translating scientific evidence into policy and practice, enabling participants to use research findings effectively for planning, decision-making, and scaling sustainable landscape management interventions.

Application:

Prospective applicants from Ethiopia only are eligible to apply for the course on the website of using the link below. Deadline to apply for the training course: 8th July 2026

https://forms.gle/uWEabbaXGLQfLsVWA

Outlines of the course:

(Themes covered during the course)

- Visioning Exercise
- Agroecology and nature-based solutions
- Landscape characterization, planning and designing of interventions
- Soil Health and Land Resource Assessment
- Hydrology and Water Resources and Water Budgeted Cropping Systems
- Soil and Water Conservation measures
- Regenerative Agriculture and Climate-Smart Farming
- Agroforestry, Rangelands and Livestock Systems
- GIS, Remote Sensing and Digital Technologies
- Climate Change, Carbon and Ecosystem Services
- Monitoring, Evaluation and Impact Assessment
- Community Institutions and Scaling Approaches transfer plan with expert feedback

Coordinators

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