

A new integrated watershed rainwater management paradigm for Ethiopia: Key messages from the Nile Basin Development Challenge

Ethiopia's policies and programs on sustainable land and water management have evolved over several decades and have had important positive impacts on land management and livelihoods.

We believe these policies and programs can be further transformed and integrated into a new paradigm that will better enable poor smallholder farmers to improve their food security, livelihoods and incomes while conserving the natural resource base.

Through the Nile Basin Development Challenge, our contributions to sustainable land management have been to strengthen its scientific foundations, identify ways to improve learning and sharing of lessons from experience, enhance the capacity of local officials and rural people to plan and implement integrated watershed-level investments, and apply new participatory planning tools at local level and new modeling and spatial analysis tools at higher levels.

Implementation of the eight core elements of this paradigm will greatly improve the long-term benefits of the Sustainable Land Management Program and related interventions in Ethiopia.

At local levels it will enable rural women and men to improve their incomes and livelihoods. At national level it will help raise the rate of agricultural growth while conserving precious natural resources.



Community discussing problems and priorities

Essential elements

Eight elements make up the new paradigm. Success is most likely if all of them are included in an integrated way. A landscape or watershed perspective is central to the new paradigm.

1. **Empower local communities and develop their leadership capacities to achieve long-term benefits and sustainable outcomes.**
Ethiopia's sustainable land management initiatives have evolved to include a greater emphasis on local participation. Carrying this trend further to focus on empowering local communities, including a stronger emphasis on gender equity and inclusiveness will increase the sustainability and benefits of these interventions.
2. **Integrate and share scientific and local knowledge and encourage innovation through 'learning by doing'.** Development partnerships are more likely to lead to sustainable outcomes than either local practices alone or promoting purely scientific technologies from outside the community.

Encouraging and facilitating participatory learning processes and experimentation, for example through multi-stakeholder innovation platforms, complements and strengthens existing extension approaches and taps into the diverse knowledge of all local actors in sustainable development.
3. **Strengthen and transform institutional and human capacities among all stakeholders to achieve the potential benefits of sustainable land management.** This should include a special focus on supporting Development Agents as front-line champions of the new paradigm.

Critical dimensions include: a) strengthening human capacities through innovative and periodic hands-on practical training; and b) strengthening institutional capacities, for example facilities such as internet access and transportation, as well as 'soft' management and facilitation skills. Given the critical role of Development Agents, their capacities need special attention.

4. **Create, align and implement incentives for all parties to successfully implement sustainable innovative programs at scale.**

Innovation by Development Agents, farmers and other actors needs positive incentives that are consistent with the risks they need to manage. 'Customer satisfaction' must be part of assessing the performance of Development Agents, while market incentives combined with targeted support to disadvantaged people are needed for farmers.

5. **Adapt new models, learning and planning tools and improved learning processes to increase the effectiveness of planning, implementation, and capacity building.**

There is a growing set of proven tools and models for participatory planning processes and higher level planning which can improve sustainable land management outcomes.

6. **Integrate multiple rainwater management interventions at watershed and basin scales to benefit rainwater management programs.**

Substantial benefits can be achieved by moving beyond single technological interventions – often driven by outside agents - to approaches that integrate appropriate interventions identified through effective planning tools at multiple levels. One size does not fit all, even in a small watershed.

7. **Attend to downstream and off-site benefits of rainwater management as well as upstream or on-farm benefits and costs.**

In many cases the main benefits of an upstream intervention go to downstream stakeholders and not to the upstream farmer. Where the benefits of sustainable land management program investments are a broad public good, or go primarily to downstream

stakeholders, or accrue only after considerable delay, then private upstream investors (e.g. farmers) need appropriate motivation and incentives to change their behaviour. Where public benefits are higher than private benefits, there are strong roles for government.

8. **Improve markets, value chains and multi-stakeholder institutions to enhance the benefits and sustainability of rainwater management investments.**

We can increase the likelihood of success using market-driven (value-chain) approaches that optimize fairly the benefits for all stakeholders, while reducing and sharing costs equitably. Stronger multi-stakeholder rural institutions can enhance rural women's and men's share of agricultural profits and assets.

These eight elements emerged from two sources. One is an assessment of the lessons learned from decades of Ethiopian and international experience. The other is the multi-disciplinary multi-partner Nile Basin Development Challenge. The components have been further developed and strengthened through consultation processes at local, national and regional state levels. This paradigm is therefore based firmly in scientific evidence, implementation experience, and Ethiopian stakeholder consultations.

Further strengthening Ethiopia's Sustainable Land Management Program is urgently needed to achieve its full promise and to maximize the benefits from the large investments currently being implemented or planned. Radical changes in policy are *not* required. While the existing program includes many elements of the new paradigm, significant changes in its implementation are needed. This will require strong leadership, capacity building for new skills and attitudes and new partnerships at all levels.



RESEARCH
PROGRAM ON
Water, Land and
Ecosystems

Led
by:



The Nile Basin Development Challenge (NBDC) is funded by the CGIAR Challenge Program on Water and Food (CPWF). It aims to improve the resilience of rural livelihoods in the Ethiopian highlands through a landscape approach to rainwater management. It comprises five linked projects examining: 1) learning from the past; 2) developing integrated rainwater management strategies; 3) targeting and scaling out of rainwater management innovations; 4) assessing and anticipating the consequences of innovation in rainwater management systems; and 5) catalysing platforms for learning, communication and coordination across the projects.

The NBDC is implemented by a consortium comprising the International Livestock Research Institute, International Water Management Institute, World Agroforestry Centre, Overseas Development Institute, Nile Basin Initiative, Stockholm Environment Institute, Ethiopian Economic Policy Research Institute, Catholic Relief Services – Ethiopia, Oromia Regional Agricultural Research Institute, Amhara Regional Agricultural Research Institute, Bahir Dar University, Ambo University, Wollega University, the Ministry of Agriculture and the Ministry of Water and Energy.

Prepared by: Doug Merrey and Terry Clayton
<http://www.nilebdc.org>

