Improving rainwater management: The Nile Basin **Development Challenge**

> Presented at Autoridad Nacional del Agua Lima, Peru, June 3, 2013 Alan Duncan (Drawing on material from Doug Merrey)





RESEARCH PROGRAM ON Water, Land and Ecosystems



by:



The Challenge: Improved rainwater management

- The Nile Basin Development Challenge (NBDC) Program aims to improve the resilience of rural livelihoods in the Ethiopian highlands through a landscape approach to rainwater management (RWM).
- "Rainwater management" refers to interventions to enable smallholder farmers to sustainably intensify agricultural production through improved rainwater management.

Context: The Ethiopian Highlands

- Densely populated
- High levels of poverty and food insecurity
- Rudimentary infrastructure
- Until recently declining per capita food production.

The Water Tower of Africa

85% of the flow in the Nile Basin at Aswan Dam originates from the Ethiopian Highlands

Rapid land degradation

Expansion of cultivation

Cultivation of steep slopes

Rainwater Management in the Ethiopian Highlands: History

 From the 1980s, a good understanding on the effectiveness of different RWM technologies to sustainably intensify production



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Check dams

Gully rehabilitation

Ponds

But ... difficult to translate knowledge into success on the ground

Why?

Why....?

- Authoritarian top-down quota-driven implementation
- Promotion of inappropriate technologies
- Insufficient focus on improving productivity and livelihoods and on creating incentives for adopting and maintaining the interventions.

Government campaigns



Destruction by farmers of previous interventions

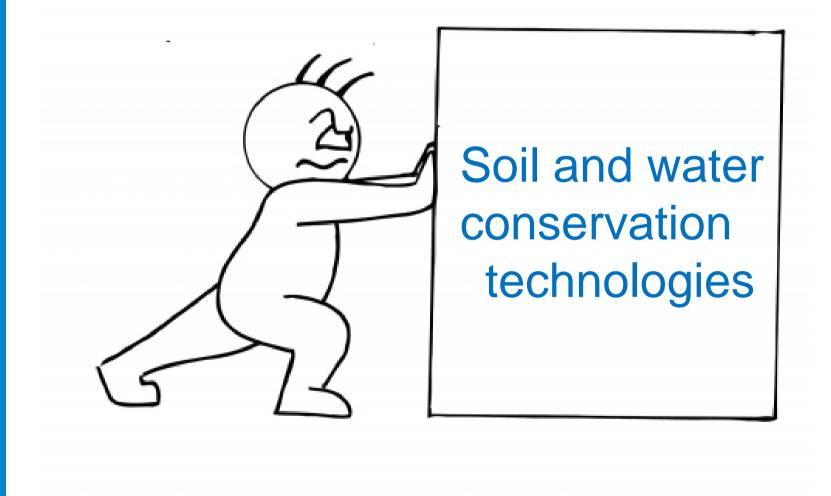


NBDC: An Emerging R4D Success Story

Field level

- Innovation platforms
- Participatory planning tools
- Basin and landscape level
 - Nile Goblet tool
- Policy level
 - National platform

Innovation Platforms (IPs).



Why Innovation Platforms?

Push RWM interventions & technologies



Or...

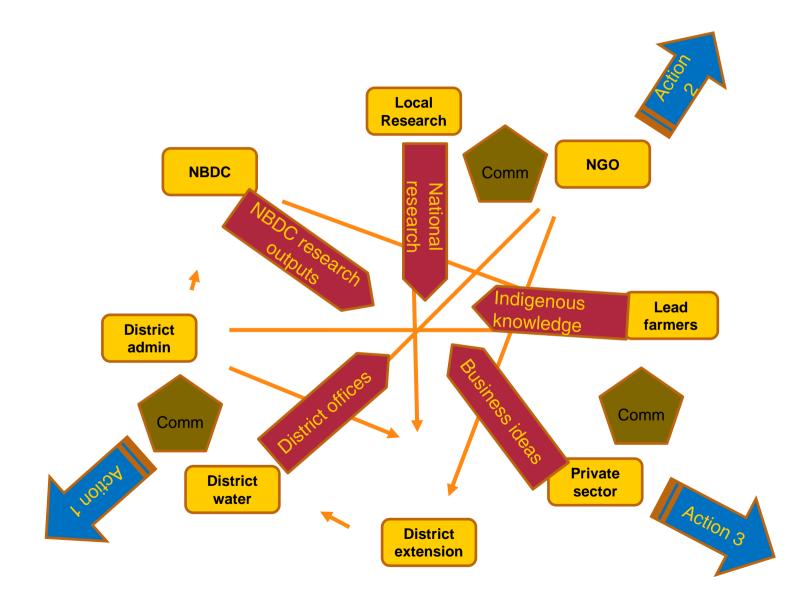
Empower & engage actors in RWM strategies

→ Achieve sustainable landscapes & improved livelihoods



Credit: Beth Cullen

Innovation Platforms

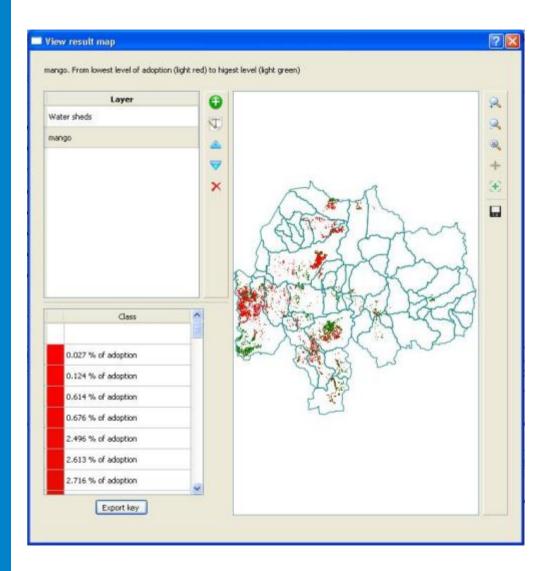


Participatory planning and learning tools – Wat-a-Game



Credit: Beth Cullen

Nile Goblet Tool



Suitability mapping of rainwater management strategies

Credit: An Notenbaert

National RWM Stakeholder Platform



Emerging messages from NBDC

- Local community empowerment and leadership based on demand, equity and inclusiveness;
- Partnerships integrating and sharing local and scientific knowledge;
- Emphasis on learning process by all parties in a linked manner;
- Creating incentives and risk management mechanisms for innovation and success;
- Transforming the institutional and human capacities of all stakeholders; and
- Adapting and using new learning and planning tools.

http://nilebdc.org





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