Opportunities for Investments in Agricultural Water in sub-Saharan Africa

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Outline

- Background
- Investment Opportunities
- Key Messages
Background
Irrigation investments declined continuously 1980s ...
Irrigation investments declined continuously since 1980s...

- Irrigation projects costly and performed poorly
- Irrigation investments crowded out by lending in structural adjustment in 1980s & later focus on environment
- Irrigation investments became less attractive and made worse by declining international food prices
- Donor interest now returning but need to identify and better implement promising investment areas
Investment Opportunities
Proposed Way Forward

➢ Improve the cost-effectiveness and performance of *irrigation* interventions

➢ Increase support for *micro-agricultural water management* interventions
Improve the cost-effectiveness and performance of irrigation interventions in sub-Saharan Africa
The DATA

- 314 projects
- fr. PCRs-PPARs
- 1965 - 2003

By Donor
- WB - 290
- AfDB - 19
- IFAD - 5

By Region
- SSA - 45
- MENA - 51
- EA - 18
- SEA - 68
- SA - 91
- LAC - 41
1. Project Size

- Sum of irrigated area of all component schemes
- A key determinant of both cost & performance

A 10% increase in total project irrigated area leads to 7% decrease in unit cost & 3% increase in economic returns
2. Investments in multi-purpose, multi-sector projects have lower unit costs

Community-driven development

Multiple use schemes e.g., integrated livestock-water-aquaculture-market development

Multiple sector projects (e.g., Agricultural and rural sector-wide approaches/ Agriculture sector investment programs)
3. Go for farmer-managed irrigation systems

Show lower unit costs and potentially better performance
4. Systems irrigating high-value crops

Show lower unit costs and potentially better performance
5. Irrigation project planning and implementation factors

**Identification**
In depth analysis of community needs and effective targeting

**Preparation**
Careful analysis of local context;
Participatory logical framework approach
Early design of M&E system)

**Implementation**
Adequate incentives for project staff
Improved supervision by donors
Participatory refinement, implementation of M&E system & elaboration of workplan & budget

**After completion**
Extended support to farmers & their organizations beyond life or project
Facilitation of marketing
M&E continues

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Project cycle

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Increase support for micro-agricultural water management interventions
1. Avoid traditional split Rainfed vs. Irrigated agriculture

Increase productivity of both blue & green water

Irrigation is a response to risk & vulnerability of rainfed systems

Depends on the local context (bio-physical, social, economic, markets,....)
Rainwater harvesting with small-scale water storage

(a) Catchment area is 10 ha feeding into one dam

(b) Catchment area is 10 ha with several dams

Hatibu, CSE
2. Evidence of poverty reducing impact of micro-irrigation technologies

• Studies in Malawi, Kenya, and Tanzania show:
  – Adopters of treadle pumps are less poor, and have a lower risk of falling back into poverty than non-adopters (*Mangisoni 2006*)
  – Women and the poor are often the (unintended) beneficiaries (*Merrey et al. 2006*)
Key Messages

• **Adopt cost-reducing and performance-enhancing agricultural water management approaches in SSA**
  – Invest in large projects comprising many small scale schemes
  – Invest in multi-purpose, multi-sector projects
  – Improve management capacities of farmers & WUAs
  – Change how we plan, design & implement projects -- “SMART” investments

• **Promote micro-agricultural water management interventions**
  – Recognize critical role of small scale private sector investments to provide livelihoods & reduce poverty
  – Create enabling environment (policies, institutions,…) to promote such investments
Thank you