Africa to Asia and Back Again:
Testing Adaptation in FBRM Project

Introductory Presentation
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Four Main Components

❖ FBL network establishment and strengthening
❖ Knowledge development and solution management
❖ Capacity building
❖ Support to investment programmes and policies
FBL Network Establishment and Strengthening

- Create a country database of Farmers, WUAs, key stakeholders
- Within and cross-country farmers knowledge sharing
- Develop tailor-made training to selected farmer groups/WUAs
- Develop and disseminate knowledge products in local languages ([www.spate-irrigation.org](http://www.spate-irrigation.org))
Knowledge Development and Management

1. Conducting solution-oriented research programmes
   - Scientifically sound that generates evidence
   - Responds to societal priorities

2. Developing and disseminating knowledge products on cross-country relevant themes:
   - Water governance and conflict mitigation
   - Management of soil moisture and fertility
   - Improvement of water diversion and distribution efficiency
   - Youth and Women empowerment
   - Water and crop productivity improvement
Capacity Building

- Consolidating existing MSc, BSc programmes
- Leadership and internship programmes
- Regional courses
- Establishing farmer learning centers
Support to Investment Programmes

- Well defined programmes with wider impact
- Physical interventions: improving floodwater distribution and management
- Institutional strengthening
- Making FBLS sustainable:
  - Resilience to climate change
  - Youth attractive enterprises
  - Water Productivity
Low Cost Infrastructural Investment in Gash Irrigation Scheme, Sudan

Investment cost: about 40 USD/ha

- 3.5 km long tertiary canal
- Infernal farm embankment
- Improved farm offtakes
There are Many Reasons to Invest in FBLS

❖ They are staged in remote locations – they can directly benefit flood and drought prone communities

❖ They are significant: 15 million ha in arid and semi-arid regions in SSA – and another 15 million in Asia and the Middle East

❖ Much of the potential is still unharnessed – relatively much investment has so far been directed to rain-fed and conventional irrigated agriculture.
The future of FBLS is bright ……

The flood and drought prone ASAL areas are increasingly becoming important livelihoods hubs.

”Due to population growth and urbanization, farmers, who had enjoyed rain-fed farming systems or places with relative plenty irrigation supply, are being pushed into dryer, more marginal areas where they become increasingly vulnerable to recurrent drought and flooding, and the unpredictability of weather patterns resulting from climate change.” FAO (2017) Partnering to build resilience, food and nutrition security
The four categories of FBLS

**Spate irrigation:** diversion, distribution and management of short duration flood flows from seasonal or ephemeral rivers

**Flood-spreading weirs:** using a series of weirs to manage and spread floods for rehabilitating degraded land, enhancing ground water recharge

**Flood plain agriculture:** cultivation of flood plains, using either receding or rising flood water or both

**Roads for water:** water harvesting from roads for multiple use
Spate irrigation defined

- Ephemeral rivers - short duration floods
- Floods carry large quantities of sediment (up to 10%)
- Floods are directly diverted and distributed to cultivable land
- Crops grow on residual soil moisture

Wadi Mawr spate irrigation in Yemen
Floodwater spreading weir (Giz, Dieter Nill) - Niger

Rehabilitate degraded land, improve groundwater recharge and agricultural productivity
Flood Plain Agriculture – Flood Rise and Flood Recession

Flood recession

Flood rise
Harvesting Floods From Roads
“Floods are not always a hazard. They may also sustain aquatic life and riverine biodiversity, recharge aquifers, enrich soils and in some of the world’s poorest areas they are the main source of irrigation.”


THE FLOOD-BASED LIVELIHOODS NETWORK

is a network of spate irrigation professionals and practitioners. The network stimulates the development of programmes of implementation that improve the livelihoods of those in spate irrigation areas, exchanges experiences and good practices, helps upgrade training, identify priority fields for improvement and research and development.

Read more...
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