

Harnessing floods to enhance livelihoods and ecosystem services

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Pilot Project in Sudan

Gash

Agri.

Scheme



Fund

- CGIAR research program on Water, Land and Ecosystems / IWMI

Lead Organization

*MetaMeta/Spate Irrigation Network Foundation,
the Netherlands*

www.spate-irrigation.org

Project Partners

- The **Hydraulic Research Centre** of the Ministry of Water Resources and Electricity, Sudan.
- The Institute of Water and Environment, **Mekelle University**, Ethiopia.
- The Chair Group: **Land and Water Development for Food Security** of the UNESCO-IHE
- Institute for **Water Education**, the Netherlands.

Duration and Budget

- *Start date: January 2015*
- *Finish date: December 2016*
- *Allocated budget: around 99 000 US \$*

Broad Objective

- This research aims to optimize the use of floods for agriculture and ecosystem services to support livelihoods settings in the Gash, Sudan.



Specific Objectives

- To study the *interventions* for ecosystems services at scheme level and how these interventions affect the livelihoods of different stakeholders with special attention to gender.

Cont.

- To add value to decision making on FBFS development by including an ecosystems and landscape perspective to current/planned interventions and policies.
- To assess and value benefits of FBFS under various development scenarios for different stakeholders and the environment.

Research questions

- What is the impact of current upstream agricultural development on downstream FBFSs and livelihoods?
- What is the added value of including socio-economics and ecosystems perspective in investment plans in flood based farming?

Cont.

- What is the most ‘efficient’ use of floods in Gash basin? And what interventions and set of intervention support this?

Expected outcomes (within project period)

- Importance of socio-economics and ecosystem approach in FBF development is endorsed (by end of 2015).
- FBFS development scenarios include effects on GAS, socio-economics, domestic water supply, and ecosystem services, identification of winner and losers and trade-off analysis (in 2016).

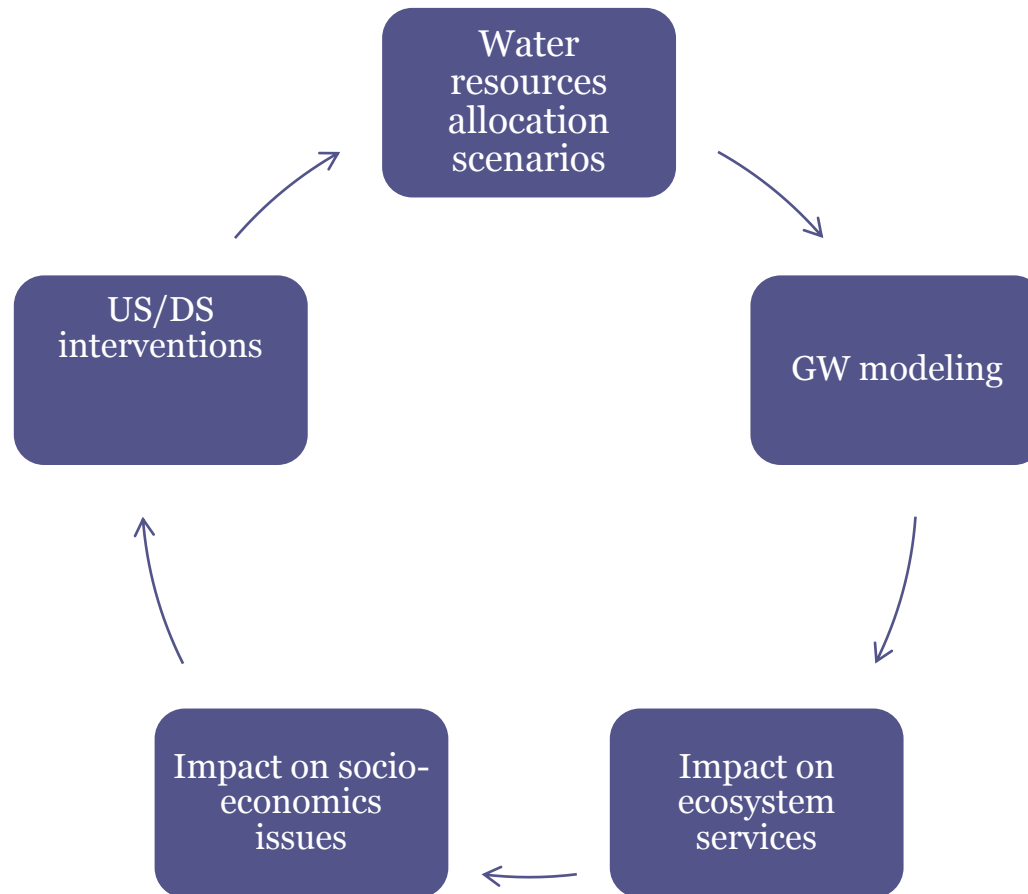
Cont.

- Integration of integrated approach on FBFS into curriculum of universities/Hydraulic Research Center (by end of 2016).

Beneficiaries

- *farmers*
- *Government officials - decision makers*
- *Technical experts - Investment planner*
- *Civil societies and community organizations*
- *Donors*
- *Research and knowledge centres*

Project Framework in the Gash



Resources to be used

- IFAD Grant: From Africa to Asia and Back Again: Testing Adaptation of flood-based Farming in Ethiopia and Sudan.
- Ongoing PhD research on the Gash irrigation.
- Many scientific researches conducted in the GAS/ Gash river

A scenic view of a lake with trees and the text "THANK YOU" overlaid. The image shows a calm body of water in the foreground, reflecting the sky. On the left, there is a dense line of green trees. In the middle ground, a large, rounded tree stands on a small island or peninsula. The background shows a distant shoreline with more trees under a clear blue sky with light clouds. The text "THANK YOU" is centered in the middle of the image in a white, sans-serif font.

THANK YOU