

Africa to Asia and Back Again:

Testing Adaptation in Flood-Based Farming Systems

Background on FBFSs

The area under these systems in Africa and Asia is estimated at 20-35 million hectares. In spite of this huge area, FBFSs are neglected in most countries, with most attention going to conventional perennial irrigation systems or alternatively to rain-fed agriculture.

FBFSs represent different resource systems that depend on temporary floods such as:

- 1) Spate irrigation and flood water spreading from ephemeral rivers;
- 2) Flood recession/ flood rise systems, inundation canals, etc... centered on flood plains;
- 3) Land depression systems, based on temporary land inundation



Benefits of FBFSs

These FBFSs serve crop production, fishery, livestock, and are the sustenance of local ecological systems. Dependent on flood events, they are prone to climate change, yet they have considerable unused economic potential, as can be seen from the different experiences in countries in Africa and Asia.



Introduction

The Project builds on an earlier grant of IFAD – Spate Irrigation for Poverty Alleviation and Rural Growth, implemented by UNESCO-IHE and MetaMeta (as convenors of the spate irrigation network) and four country chapter of the Spate Irrigation Network, hosted respectively by Mekelle University (Ethiopia), Hydraulic Research Centre (Sudan), Water and Environmental Centre (Yemen) and Strengthening Participatory Organizations (Pakistan).

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Research components

1. Network on FBFSs established and strengthened on national level with membership of wide range of water professionals, academics and farmers who are involved in development of FBFSs in Sudan.



2. Knowledge development through oriented applied research such as the ongoing research program "On Farm Water Management" implemented by HRC in the GAS spate system.

3. Capacity building through MSc programs as well as short courses

4. Support to investment programmes and policies periods.



Research Objectives

The rationale of the proposed grant project is to contribute to the build-up of the practical knowledge and national and local capacity to systematically and comprehensively support the productive use of flood-based farming systems (FBFS) for poverty alleviation and inclusive growth in water-stressed regions of Africa and Asia with relatively short flood periods.

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