Using Floods as an Asset

Opportunities

The Network invites partners in the agriculture and water sector to work together to improve Flood-based Livelihood Systems, by improving practices related to water distribution, water rights, soil moisture retention and soil fertility, new crops and fisheries, and conflict mitigation mechanisms, with the fundamental aim to increase the potential of floodwater for agriculture and other livelihood uses.

The Network currently operates in Africa (Ethiopia, Kenya, Malawi, Somaliland, Sudan) and Asia (Afghanistan, Myanmar, Pakistan, Yemen) with Country Chapters being operational or being established in these countries. The Flood-based Livelihood Systems Network Foundation holds office in the Netherlands.

Contact

To learn more on Flood-based Livelihood Systems and the work of the Network in Africa and Asia, please visit the website [www.spate-irrigation.org] and contact Daniel Wiegant [dwiegant@metameta.nl] and Abraham Mehari [ameharihaile@metameta.nl].

Implementing partners

![META](image1)

World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

Funding partners

![IFAD](image2)

FINANCING POOR RURAL PEOPLE TO ENSURE POVERTY REDUCTION

![CIGAR](image3)

RESEARCH PROGRAM ON WATER, LAND AND ECOSYSTEMS

Spate Irrigation Network Foundation
Water availability is increasingly under pressure as a result of population growth, environmental degradation and climate change. More than ever, the potential offered by seasonal floods needs to be harnessed; to strengthen agricultural livelihoods, to improve social equity and to increase the ecosystem integrity. Harnessing floods is a quintessential method to allow rural communities in vulnerable areas to adapt to climate change. For many farmer communities who depend on agriculture and fisheries, floods are not a hazard but rather an asset.

Flood-based Livelihood Systems can be classified in different categories:
- Floodplain agriculture: cultivation of flood plains, using rising and receding floods;
- Spate irrigation: diversion of short floods from seasonal rivers or wadis to fields by means of bunds and canals. A traditional method in Yemen, Pakistan and North Africa and currently expanding in Eastern Africa;
- Inundation canals: irrigation through canals that fill up by temporarily high water in rivers. A common system in ancient Egypt, and continues to be so in parts of Sudan;
- Depression agriculture around temporary wetlands: dambos and bas-fonds are common in the humid areas of West, Southern and Central Africa.

Other productive activities carried out in floodplains are:
- Fisheries with floodplain ponds and finger ponds: when water levels increase in lake basins and floodplains in mainly West Africa and South East Asia, small ponds are filled with water and fish fauna. After the water has receded, fish get trapped in the ponds and are grown for human consumption;
- Flood pastures: pastoralist communities use flooded areas for cattle grazing;
- Timber and bushlands: forest and bushlands are common in floodplains, being used as an important source for fuelwood and fodder harvesting;

**Objective**

Through the Flood-based Livelihood Systems Network, partners in Africa and Asia jointly aim to maximize the livelihood potential of floods by building strong farmer networks, conducting solution-oriented research, and capacity building to create a new cadre of young professionals who can promote development of, and investment in, flood-based livelihood systems.

**Approach**

The network actively involves WUAs and farmer communities in improved practices and structures to harness floods and act as responsible stewards of flood waters for livelihood and ecosystem improvement. The network aims to give farmers a platform for peer-to-peer discussion and to catalyse horizontal learning that spreads scalable and practical ideas that are relevant to WUAs and farmer groups. The network also aims to decrease downstream losses by supporting sound upstream natural resource management and creating upstream-downstream linkages.

Agricultural and water innovation systems are shifting towards systemic partnership-based co-innovation processes in which farmer groups find themselves at the forefront of exchange and learning, and bring in their own innovation capacity. By providing a platform for WUAs and farmer groups to learn from peers, the Network aims to create a self-evolving farmer movement.