



## **Spate Irrigation Network**

The Spate Irrigation Network, also known as the **Flood Base Livelihood Network**, operates in eight countries under the organization **MetaMeta Research**, based in the Netherlands. Since 2012, the Spate Irrigation Network has been collaborating with SPO in Pakistan. Spate irrigation is a form of water management that harnesses short-term floods from dry riverbeds for productive use. In Pakistan, it is known by various names: rod-kohi, hill-torrent irrigation, sailaba, or nai. The total area prepared under these systems in Pakistan amounts to 1,300,000 hectares, though not all of this area is utilized, making it the second-largest source of water used in the country.

**MetaMeta Research** offers services in water development and management, particularly in agriculture, supported by sound engineering practices, stakeholder engagement, and applied research on water and natural resource management. The organization has adopted several priority themes, including groundwater management, spate irrigation, green infrastructure, water allocation, natural resources governance, and regenerative agriculture. The goal is to advance practical knowledge on these topics through dissemination and training.

### **Activities:**

- Knowledge and Research Project on Irrigation Water Charging (with HR Wallingford)
- Knowledge and Research Project on Community Spate Irrigation (with HR Wallingford)
- Evaluation of Eastern Lowlands Wadi Development Project (for IFAD)
- Secretariat of the Spate Irrigation Network
- Preparation of Training Package on Participatory Groundwater Management
- Preparation of Ideas Book on Flood Management
- Training in Water Resource Management as part of an international course (for WES, Belgium)
- Contribution to the Agricultural Water Management Resource Book (World Bank)
- Contribution to Pakistan Country Water Resource Assessment Strategy (World Bank)
- Support for the Program for Effective Water Governance in seven countries – Benin, Burkina Faso, Ghana, Kenya, Niger, Tanzania, and Uganda (for Global Water Partnership, funded by the European Union)

- Training in Water Management in Ephemeral Rivers in Pakistan (NUFFIC)
- Training in Community Spate Irrigation in Yemen (NUFFIC)

### **Projects in Pakistan with SPO:**

#### **New Water Rights for Basin Management and Inclusivity in Spate Areas of Pakistan (NEWARBI) (2020-2024)**

This project covers two spate irrigation areas in Balochistan (Bagh Nari) and Sindh (Nai Gaj), funded by the RVO (Netherlands Enterprise Agency) and Fonds Duurzaam Water (FDW). The consortium partners include the Research and Development Foundation (RDF), Strengthening Participatory Organisation (SPO), and the governments of Sindh and Balochistan.

#### **Project Description:**

The project aims to contribute to the re-setting of water distribution rules in target command areas, promoting efficient water use in agriculture to enhance livelihood opportunities and livestock development. Interaction with pastoralist livelihood systems is particularly important. Activities include training, capacity building, empowerment of the weakest stakeholders, lobby and advocacy at the district level, and command area infrastructure development. A mix of expertise related to social change processes and concrete actions in water management rules, regulations, and improved practices is essential.

#### **Actual Services Provided:**

1. Introduction of livelihood opportunities, focusing on spate irrigation areas and rangeland systems
2. Resource management plans with community engagement
3. Mapping of spate irrigation systems and discussing improved water allocation rules
4. Development of value chains for organic products
5. Facilitating discussions to develop and update water distribution rules
6. Well-being surveys

## **2- Pakistan and Global - From Africa to Asia and Back Again: Testing Adaptation in Flood-based Resource Management (2015-2020)**

**Countries:** Afghanistan, Ethiopia, Kenya, Malawi, Myanmar, Pakistan, Sudan, Yemen

**Funded by:** IFAD & European Commission (EC)

### **Project Description:**

The project aims to build practical knowledge and capacity at national and local levels to support the productive use of flood-based livelihoods (FBL) for poverty alleviation and inclusive growth in water-stressed regions of Africa and Asia.

### **Actual Services Provided:**

- Initiation and guidance of action research projects
- Planning, capacity building, and training
- Site assessment reviews
- Development of MSc packages

### **Other Projects:**

- Pakistan - Sindh Strategic Water Plan
- Pakistan - Conjunctive use of water in canal irrigation
- Pakistan - Curriculum development for Integrated Water Resource Management and Participatory Irrigation Management.