

SPATE IRRIGATION NETWORK – SUDAN CHAPTER  
WORKPLAN, 2011 to 2014



## **1. Introduction**

This document discusses the work plan - proposed activities and expected outputs - of the Sudan Spate Irrigation Network (SSpN) in the period 2011 to 2014. The SSpN will operate as an integral part of the international Spate Irrigation Network (SpN) and will tailor its activities within the framework of the overarching goals and objectives of the SpN; but will act with full autonomy and will have the full legitimacy to decide and implement what it considers imperative spate irrigation activities in Sudan.

This document first introduces the SpN. It then presents a brief account of the spate irrigation system in Sudan followed by description of the Spate Irrigation for Rural Economic Growth and Poverty Alleviation Project (SIREGPA), which will be implemented in Sudan by SSpN in the period 2011 to 2014. Finally and at a greater length, the objectives, organizational structure of SSpN and its activities in the period 2011 to 2014 are discussed.

## **2. The International Spate Irrigation Network**

The International Spate Irrigation Network (SpN) brings together the current knowledge and experience in spate irrigation all over the world, connects the different professionals, practitioners and organizations working in spate irrigation, and promotes and lobbies for adequate and appropriate attention to spate irrigated livelihoods. The SpN is in existence since 2002 and has 450. It is co-convened by UNESCO-IHE and MetaMeta and operates a website [www.Spate-irrigation.org](http://www.Spate-irrigation.org) that attracts 1500 visitors/month. The website contains training material and extensive documents on technical, social, economical and environmental aspects of spate irrigation.

The SpN has realized some tangible achievements. They include establishment of WUAs in Yemen as part of an EU food Security Programme; publication of the FAO Irrigation and Drainage Paper 65: Guidelines on Spate Irrigation; Setting-up and effectively running an international short course on Spate Irrigation and Management of Drought at UNESCO-IHE; Acquiring a large grant from IFAD and UNESCO-IHE for the Project: Spate Irrigation for Rural Economic Growth and Poverty Alleviation (SIREGPA)

## **3. SIREGPA Project Rationale**

The project rationale is the scope for improved productivity and livelihoods in spate irrigation areas through applied research, knowledge management, network development and policy advocacy. This will be achieved by the activities of the project and by making use of the Spate Irrigation Network (SpN) - that exists since 2002 and is convened by UNESCO-IHE and MetaMeta.

In the past few years good practices have been documented and training material has been prepared - a process that is still continuing. By documenting and sharing experiences within and between countries a compendium of improved practices is evolving on organization and governance, on water

diversion and engineering, on improving agronomy, on moisture management and non-agricultural activities.

The rationale of the project is that spate irrigation in general and the large menu of improvements requires much more attention and should be promoted at country policy level as well as at operational level. The combined effect of improved spate irrigation system management can vastly increase economic productivity and improve livelihood situations considerably. The spate irrigated areas in most countries constitute poverty pockets hence making use of the potential for improvements effectively contributes to poverty alleviation.

IFAD has been the single-largest development organization that has supported spate irrigation. IFAD has supported spate irrigation activities among others in Tunisia, Sudan, Yemen and Eritrea.

### **3. The Project Programme**

#### *Overall goal*

The overall goal of the programme is to develop spate irrigation policies and capacity building programmes based on solutions-oriented action research and documented practical experiences that in an evidence based manner contribute to rural poverty alleviation and accelerated growth in marginal areas in four countries: Ethiopia, Yemen, Pakistan and Sudan.

#### *Main objectives:*

- Strengthened spate irrigation network in four countries: Ethiopia, Pakistan, Sudan, Yemen;
- Country policy notes with budget, area identification and programmes;
- Capacity building programs in spate irrigation developed with key implementers in four countries;
- Two innovative, up-scalable action research activities per country implemented;
- Continued knowledge development (in local language & based on practitioners experiences);
- Six international MSc students trained;
- Promote open source sharing of knowledge;
- Process of incorporating spate irrigation in curricula of universities and agricultural colleges started in four countries;
- Global inventory of spate irrigation and flood based farming systems;
- Provide technical backstopping to IFAD project and country programmes.

#### *Target group*

The target group is: smallholder farmers in spate irrigated areas, farmers' organizations and current and potential support organizations in spate irrigation - in particular key implementing organizations, educational institutes and local organizations that are associated with the country chapters of the

Spate Irrigation Network (SpN). Special care is taken to connect to relevant IFAD-funded investment projects and country programmes as well as the activities of UNESCO-IHE in the four targeted countries.

#### *Programme duration and packages*

The programme will be of four-year duration (2011 to 2015) and will comprise of five main components or Work Packages (WP):

WP 1: Project Management

WP 2: Strengthening the SpN;

WP 3: Innovative action research projects;

WP 4: Capacity building, continuous knowledge development & dissemination;

WP 5: Expert pool support to IFAD projects and country programmes.

## **2. Spate Irrigation system in Sudan**

With a total irrigated area of 285,000 ha, spate irrigation in Sudan is an important contributor to poverty alleviation and improvement of rural livelihood of the population in the most marginal areas of the country. During the time of the British colonial administration some very large spate irrigation systems were developed – in particular the Gash and the Tokar systems. Both of these systems are supplied by major rivers originating from Eritrea – respectively the Gash and the Barka and both ultimately disappear in inland delta. The Gash and Tokar systems were originally developed for cotton export – but over the years fortunes drastically changed. Other spate irrigation areas in Sudan are Khor Abu Habil in Kordofan and Derudeb in the Port Sudan area. In all these areas spate irrigation operates under areas of rural poverty and if well managed can make a substantial difference.

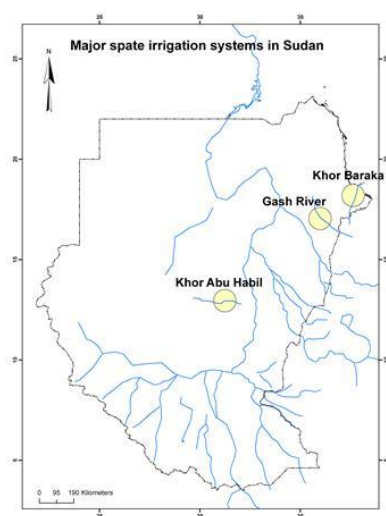


Figure 1: Major spate irrigated areas in Sudan

In Sudan, Spate irrigation has great potential, unexplored opportunities to be studied and developed to contribute to poverty alleviation, adaptation to climate change and local food security. The SSpN acknowledges these needs and potentiality and has drafted activities as part of the SIRGPA project that target the development of spate areas and the livelihood in these neglected poor areas.

### **3. Sudan Spate Irrigation Network**

#### **3.1 Overall goal**

- To make a substantial and tangible contribution to sustainable improvement of the livelihoods of the rural poor communities in the spate irrigated areas in Sudan.

#### **Major objectives**

- Develop and implement top-end and applied research programmes that address real problems in spate irrigated areas and link the outputs to policy formation
- Set-up capacity building programmes at a BSc, MSc as well as in the form of demand driven short courses with the objective of developing new generation of spate irrigation thinkers as well as acquainting the existing spate irrigation professionals with relevant recent advancements in the field
- Promote the exchange and documentation of experiences through several outlets including practical notes, policy briefs, videos, and organizing meeting and educational programs
- Embracing farmers as key members of the SSpN and providing them with the platform to share their experiences.

### **3. Structure**

#### **3.1 Operating principles**

The central operating principle will be that the legitimacy of the SSpN comes from actions and impact on the ground – more so than from formal internal governance.

The following operating principles will apply for the SSpN:

- The focus is on action
- The network will work with other organizations – in implementing activities and in encouraging those other organizations to implement activities in the spate irrigation areas
- The network will try to create a movement and have many concerned people involved and give due recognition to the efforts of different members
- Knowledge and experience comes to a large extent from people working on the ground and this needs to be captured and stimulated. In line with the SpN, SSpN will profess an open source philosophy for its information. It will make intensive use of effective modern media (local television channels, desk top publishing, internet)

- Special efforts will be made to work in local languages

### 3.2 Organizational set-up

The SSpN will be operated as a partnership of Hydraulic Research Station (HRS), Ministry of Agriculture and the SpN. The activities will be stimulated from the field offices of HRS.

The organization of the SSpN will consist of a Convenor and a Secretary – whereas use will be made of administrative and financial services within the convening organizations (HRS) as far as reasonable. The tasks of the Convenor and Secretary are given in the table. For implementation of activities that require more time and efforts, the SSpN may expand its core and/or engage project teams. Financial administration will be brought in line with the requirement of the organizations funding it. As there are three partners in the partnership the route of external funding will be decided jointly, keeping the pragmatics of the administrative arrangements in mind. Where possible, however implementation of activities will be with partners and the SSpN is to serve as catalyst and support and not competitor of its partners and members.

Convenor	Bring different parties in spate irrigation together Convene meeting Keep the discussion/ development of appropriate approaches lively – at network and at policy level Identify partner programmes and funding sources Media contacts Policy/ thematic contacts with SpN
Secretary	Ensure membership stay informed and active Identify partner programmes and help in their formulation Media contacts Management of information exchange Operational contacts with SpN Reporting and administration

Members of PSpN will be both individuals and organizations. They are expected to actively support and contribute to meaningful activities of the network. There will at this stage not be membership fees, as this may exclude some (students) and will involve small amounts that are difficult to administer. SSpN funding instead will be sought from donors, funds and programmes – nationally and internationally, whose objectives are in line with those of SSpN. The SSpN will have access to

experts through SpN or other organizations – to ask for ideas on the possible programmes and reflect on the quality of implementation of ongoing programmes

The positions of the convenor and the secretary will also be reconsidered every two years – unless personal circumstances or organizational requirements require this to be done earlier.

### **3.3 Link to global Spate Irrigation Network.**

The SSpN is a chapter of the SpN. All parts of the SpN form a single global community of practitioners and professionals aiming to improve livelihoods and productivity in these resource systems.

The cooperation between SSpN and SpN is

- Joint promotion of effective programmes and policies in spate irrigation areas
- Jointly developing the knowledge base – among other maintaining and improving the website, producing and sharing practical notes and other means of dissemination
- Effectively managing innovations across the international network
- Support to implementation of joint programs – for instance the mainstreaming of spate irrigation in higher education
- Identifying joint funding opportunities

## **4. Activities**

### **4.1 Core activities**

The core activities of the SSpN are:

- Strengthen the SSPN
- Identify opportunities for partnership programmes
- Initiate new activities in support of development in the spate irrigated areas
- Pick up ideas and encourage sharing and documentation, good examples
- Contribute to policy development and agenda setting

### **4.2 Programmes 2011-2014**

The work programme for 2011 to 2014 will be based on the project “*Spate Irrigation for Rural Growth and Poverty Alleviation*”. It will be being implemented in collaboration with UNESCO-IHE, MetaMeta and several local organizations and Universities.

The details of the five work packages of the programme along with the results-based budget are given in Table 1.

Table (1): Details of the five work packages of the programme along with the results-based budget

<b>Sudan Programme and Budget for 2011-2014</b>				<b>Indicative distribution</b>			
<b>Cost category</b>	<b>Unit/duration</b>	<b>unit cost</b>	<b>Total budget in USD</b>	<b>year 1 (35%)</b>	<b>year 2 (25%)</b>	<b>year 3 (25%)</b>	<b>year 4 (10%)</b>
<b>Project Management</b>							
<b><i>Project Supervisory Committee</i></b>							
<i>facilitating access to higher level relevant government institutions including Ministries to: 1) get access and permission to open bank accounts and utilize project financial resources with less bureaucracies; 2) get authority to use relevant Ministries and Government department data base; 3) facilitate the endorsement of state policies as part of the countrywide relevant development policies; facilitate project staff international travels</i>	4 years	2250	9000	3.000	2.000	2.000	2.000
<b><i>Project Country Team Leader</i></b>							
<i>Develop Country workplan</i>							
<i>Timely and correct mid year and annual reporting including monitoring of (cumulative progress by WP and country)</i>							
<i>Progress and final report writing</i>							
<i>Facilitating workshops and meeting</i>	4 years - lumpsum	5.000	20.000	10.000	5.000	4.000	1000
<i>Financial statement preparation and facilitating auditing</i>							
<b><i>Office Running And Secretariat</i></b>							
<i>Facilitating effective communications</i>	4 years - lumpsum		5.000	2.000	1.000	1.000	1.000
<i>Archiving project documents</i>							
<b><i>Local Travel And Accommodation - visit project sites</i></b>	10 journeys	200	2.000	1.000	500	500	0
<b><i>International Travel and accommodation</i></b>	3 journeys	2.000	6.000	0	2.000	2.000	2.000
<b><i>Sub-total</i></b>			<b>42.000</b>	<b>16.000</b>	<b>10.500</b>	<b>9.500</b>	<b>6.000</b>



<b>WP 1: Strengthening the Spate Irrigation Network</b>							
<i>Develop Country Network 4-year plan that includes the vision, mandate and key activities</i>	<i>1 network plan</i>	<i>2.000</i>	<i>2.000</i>	<i>2.000</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Develop Country Data Base of Spate Specialists (network members)</i>	<i>1 database</i>	<i>2.000</i>	<i>2.000</i>	<i>2.000</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Identification of key implementation organizations and implimentation of tailor-made support to this organizations in the form of training meetings and lectures (1 educational institution, at least 1 farmers' organization, at least 1 research institution, 1 private investing company)</i>	<i>4 years</i>	<i>3.000</i>	<i>12.000</i>	<i>8.000</i>	<i>3.000</i>	<i>1.000</i>	<i>0</i>
<b>Sub total</b>			<b>16.000</b>	<b>12.000</b>	<b>3.000</b>	<b>1.000</b>	<b>0</b>
<b>WP 2: Innovative Action Research Projects</b>							
<i>Stakeholder meeting to identify research topics&amp; introduce the project</i>	<i>1 activity</i>	<i>14.082</i>	<i>14.082</i>	<i>14.082</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Preparing research documents (existing-new technical documents-concept notes &amp; proposals)</i>	<i>2 activities</i>	<i>5.000</i>	<i>10.000</i>	<i>9.000</i>	<i>1.000</i>	<i>0</i>	<i>0</i>
<i>Supervision and guidance reporting progresses of action research activities by project leader</i>	<i>2 activities</i>	<i>3.000</i>	<i>6.000</i>	<i>3.000</i>	<i>2.000</i>	<i>1.000</i>	<i>0</i>
<i>Implementation of action research activities (including S-S exchange)</i>	<i>2 activities</i>	<i>18.000</i>	<i>36.000</i>	<i>3.000</i>	<i>18.000</i>	<i>12.000</i>	<i>3.000</i>
<i>BSc/MSc field research / documentation activities by Bsc and Msc students peferably as integral part of the action research</i>	<i>5 activities</i>	<i>1.500</i>	<i>7.500</i>	<i>3.000</i>	<i>1.500</i>	<i>1.500</i>	<i>1.500</i>
<i>Write-up of the action research report</i>	<i>2 reports</i>	<i>1.750</i>	<i>3.500</i>	<i>0</i>	<i>500</i>	<i>1.500</i>	<i>1.500</i>
<i>Competitive research grant</i>	<i>2 activities</i>	<i>11.500</i>	<i>23.000</i>	<i>3.000</i>	<i>15.000</i>	<i>5.000</i>	<i>0</i>
<b>Sub total</b>			<b>100.082</b>	<b>35.082</b>	<b>38.000</b>	<b>21.000</b>	<b>6.000</b>
<b>WP 3: Capacity building, Continuous Knowledge Development and Dissemination</b>							
<i>Contribution to preparation of spate program development charter as annex to the Country policy on land and water management and development</i>	<i>1 country note</i>	<i>5.000</i>	<i>5.000</i>	<i>0</i>	<i>2.500</i>	<i>2.500</i>	<i>0</i>
<i>Translation, preparation, adaptation of practical notes</i>	<i>4 notes</i>	<i>1.500</i>	<i>6.000</i>	<i>1.500</i>	<i>1.500</i>	<i>3.000</i>	<i>0</i>
<i>Introduction of Spate Irrigation in curricula of Institutes of Higher Learning (national workshop)</i>	<i>1 national workshop,</i>	<i>15.000</i>	<i>15.000</i>	<i>0</i>	<i>15.000</i>	<i>0</i>	<i>0</i>

	leading to spate irrigation course/module						
Materials/equipment: 1 laptop, 1 photo camera, 1 video camera, 1 combine fax, copy and printer machine	lumpsum		3.500	3.500	0	0	0
<b>Sub total</b>			<b>29.500</b>	<b>5.000</b>	<b>19.000</b>	<b>5.500</b>	<b>0</b>
<b>Grand Total</b>			<b>187.582</b>	<b>68.082</b>	<b>70.500</b>	<b>37.000</b>	<b>12.000</b>