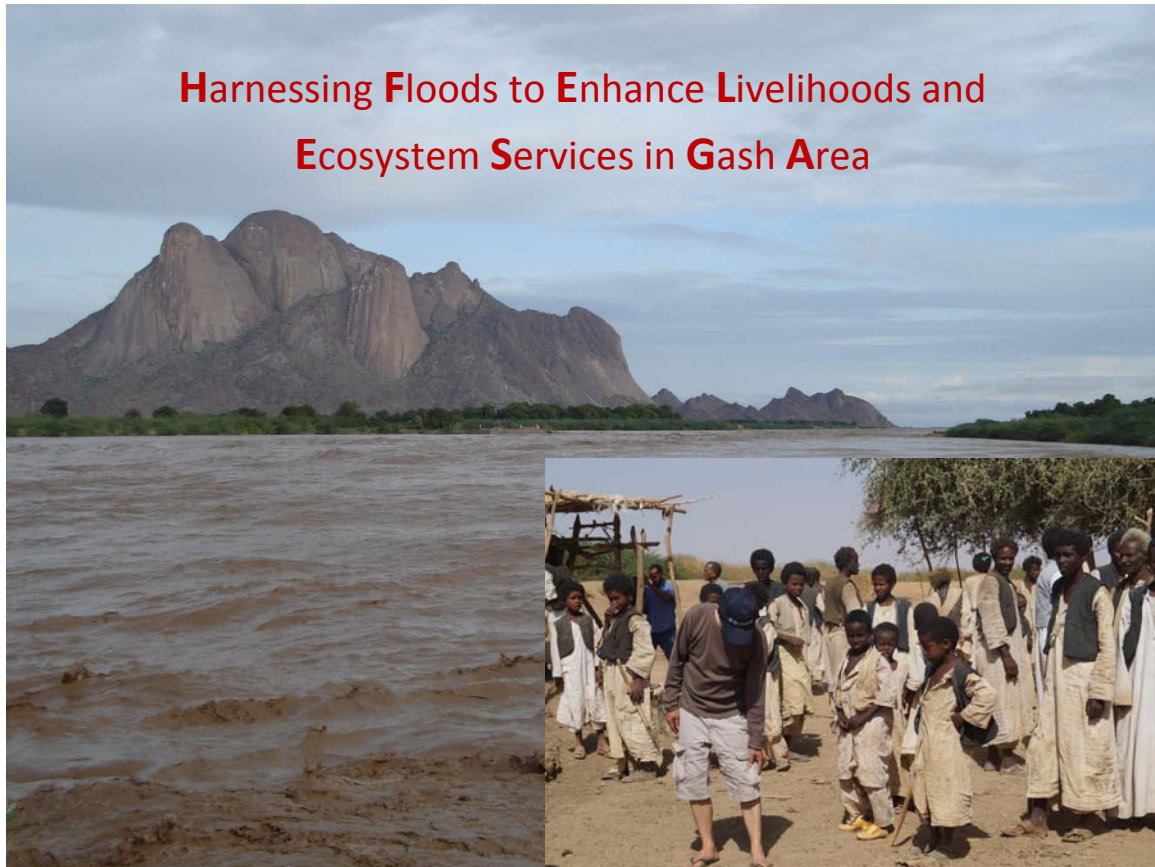


Inception Workshop Report:



Ministry of Water Resources and Electricity
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Inception Workshop Report

**Harnessing floods to enhance livelihoods and ecosystem services
in Gash area**

Background

The research project “**Harnessing floods to enhance livelihoods and ecosystem services**” is funded by CGIAR research program on Water, Land and Ecosystems and it is being implemented in the Gash area in Sudan by the Hydraulics Research Center (HRC) of the Ministry of Water Resources and Electricity over the period Jan. 2015 to Dec. 2016 in collaboration with its partners, Spate Irrigation Network Foundation (leading partner), MetaMeta, UNESCO-IHE and Mekelle University.

The research project aims to optimize the use of floods for agriculture and ecosystem services to support livelihoods settings in the Gash.

Kickoff workshop

The inception workshop has taken place in Kassala Sudan from 28th to 30th April 2015. Its objectives can be summarized as follows:

- To acquaint the key stakeholders with the overall framework of the research project.
- To detail the research program in the Gash Agricultural Scheme in Sudan viz:
 - a) Major research questions, approaches and methods
 - b) Main deliverables and communication strategies

The workshop program is shown in Annex (1).

Workshop sessions and activities

Around 31 of key stakeholders were invited from governmental and non-governmental organizations representing different specializations with relevance to the scope of the research program as well as the farming communities who are both partners and the main end users of the research programme. A list of participants is given in Annex (2).

Mr. Magzoub Abu Musa, State Minister of Agriculture, Irrigation and Forestry in Kassala State opened the workshop emphasizing the



importance of solution and development oriented research for enhancing the livelihoods of the upstream and downstream (Gash Die) farmers.

The first day was rich of short and intensive power point presentations on various themes describing the overall background of the research program, existence of spate irrigation systems in Sudan, historical review of the Gash Agricultural Scheme, the experience of the Water Users Associations (WUAs). Short description on the research framework in Gash area in



addition to material on gender status and socio-economic issues in the GAS were presented. Effective discussions were held among the participants and many proposals on hot areas of research needed in the Gash were mentioned, List (1).



The second day has followed the same scenario of the first day with power point presentations on water resources allocation, ground water modeling, and means of documentation and communication. The day was wrapped-up with a clearly defined research programmes - this is elaborated further in the section below.



Field visit to Gash die

The field visit to Gash die, the most downstream and largely neglected section of the Gash Basin, was conducted on the third day under the guidance of Mr. Tirk, the president of the Higher Council of WUAs, leader of Hadandawa tribe.

Different sites were visited, e.g.

- Etma Hafeer, the oldest water pond, where many inhabitants and livestock rely on it for water supply
- Hadalya main canal where the study team has discussed its performance and experimental mesga is selected for study purposes
- Some wells in Karakon



Workshop outcomes

By the end of the workshop, many proposals were suggested by the key stakeholders as hot issues for the development of GAS and to enhance livelihoods as given in List (1) in the Annexes. However, in the framework of this research project, the following priority research themes would be in depth investigated over the project duration:

- The optimal allocation and distribution of Gash River's water resources considering different water uses namely for agriculture, water supply, groundwater recharge and environmental needs by applying RIBASIM, a tool for water resources modeling
- The availability of groundwater resources and the possible interlinkage with surface water resources
- Upstream/downstream interventions with special emphasis on the impact of the current and future upstream developments on Gash die

- Investigation of the optimum mesga canal, most efficient irrigation scheduling and soil moisture utilization in the GAS by conducting intensive on farm measurements in two selected farms located in Kassala and Hadalya Blocks respectively with full support from the WUAs body in the GAS

Social programs

The workshop was associated with social programs organized by the Kassala state and the Water Users Associations body.

Annexes:

Annex (1): Project Launch Workshop Harnessing Floods to Enhance Livelihood and Ecosystem Services April 28 to 30, Kassala, Sudan

This inception workshop with key stakeholders aims at:

- Having a shared clear understanding of the overall research for development framework of the project.
- Detailing the research programme in the Gash Agricultural Scheme in Sudan: a) key research questions, approaches and methods; b) major deliverables and communication strategies

Time	Topic	Speaker	Chair/Reporter
<i>Day 1: 28 April: Focus on project rationale, background and overall research framework</i>			
8:30-9:00	Registration	Eng. Amira and Eng. Soona	Chair and reporter: Prof. Yasir
9:00-10:00	Opening Remarks	Prof. Yasir, Director of HRC	
		Dr. Simon Langan (IWMI-WLE)	
		Dr. Frank (MetaMeta and Spate Irrigation Network Foundation)	
		Dr. Suryadi (NESCO-IHE)	
	Official Opening: State Minister of Agriculture – Kassala State		
10:00-10:30	Refreshments	Facilitation: Eng. Amira, Eng. Soona	
10:30-11:00	The WLE Research for development Programmes: The Nile Basin & East Africa Focal Region	Dr. Simon Langan, IWMI	Chair: Dr. Abraham Reporters: Saied and Mathijs
11:00 to 11:30	The overall research programme of the project: Harnessing Floods for Enhanced Livelihoods and	Dr. Frank	
11:30-11:50	Introduction to FBFS in Sudan	Assoc. Prof. Abu Obieda	
11:50 -12:10	The Gash Agricultural Scheme (GAS): Status, potential & challenges	Eng. Kamal, DG of GAS	
12:10-12:40	The GAS WUAs: organizational structure, achievements, challenges, future plans	Eng. Mahmoud, Chair Apex WUA	

12:40 to 13:10	Discussion	Participants	
13:10 to 14:30	Lunch	Facilitation: Eng. Amira, Eng. Soona	
14:30 to 15:00	WLE project in Sudan: Background, objectives, and Research framework	Eng. Amira/Abu Obieda/Yasir	Chair: Dr. Suryadi Reporters: Saied and Ewout
15:00 to 15:20	Ecosystem services in GAS	Dr. Hassan M. Ahmed	
15:20 to 15:50	Anthropology/ Gender issues in GAS	Ms. Khadiga	
15:50 to 16:15	Coffee Break	Facilitation: Eng. Amira, Eng. Soona	
16:15 to 17:15	Discussions/Wrap-Up	Participants / Prof. Yasir, Dr. Frank	

Time	Topic	Speaker	Chair/Reporter
Day 2: 29 April: Focus on the research programme in Sudan: work plan, methods, deliverables, communication strategies			
9:00 to 9:30	Introduction to the draft work plan	Dr. Abraham	Chair: Simon Langan Reporters: Suryadi and Ewout
9:30 to 10:00	Water allocation - RIBASIM modeling	Eng. Abdel Nassir	
10:00 to 10:30	Groundwater modeling	Eng. Kabeer	
10:30 to 11:00	Soil fertility in GAS: status and implications on food insecurity and nutrition deficiency	Dr. Frank and Dr. Abraham	
11:00 to 11:30	Refreshments	Facilitation: Eng. Amira, Eng. Soona	
11:30 - 12:00	WLE communication strategies and communication support	Abby , WLE and IMWI	
12:00-12:30	Communication strategies for the Project: Harnessing floods for enhanced livelihoods and ecosystem service	Mr. Mathijs and Eng. Ahmed	
12:30-13:15	Discussion	Participants	
13:15 to 14:30	Lunch	Facilitation: Eng. Amira and Eng. Soona	
14:30-16:30	Group discussion on the work plan	Participants	Facilitators: Abby and Abraham
16:30-17:30	Feedback from the group discussion/wrap-up	Group discussion representatives/ Prof. Yasir and Dr. Simon	
Day 3: 30 April: Field trip to the Gash Agricultural Scheme (GAS): Upstream and downstream Objective: to get acquainted with the main features of the scheme and link the planned research activities to field realities. A separate detailed programme will be prepared and shared prior to the field visit.			Field visit guide: Eng. Kamal, Saied, Prof. Yasir Reporters: Amira, Mathijs and Ewout

Annex 2: Participants List

Table (1): Stakeholders List

No.	Name	Organization	Position	Contact
1	Eng. Eltayeb Mohamed Yousif	Gash River Training Unit, MWRE	Executive director	0912861662
2	Eng. Saied Magzoub Saied	Gash River Training Unit, MWRE	Deputy director	0912665186
3	Eng. Soona B. A. Rahim	Gash River Training Unit, MWRE		0912292099
4	Eng. Hashim A. Ibrahim	Gash Agricultural Scheme, MoA	Deputy DG	
5	Mohamed Abdalla	Gash Agricultural Scheme, MoA	Block inspector	
6	Ahmed Abu Tahir	Gash Agricultural Scheme, MoA	Block inspector	
7	Mr. Mohamed Abdel Hay	Groundwater Research - Kassala	DG	0912318200
8	Mr. Ishag Babiker	Groundwater Research - Kassala		ishaggwwdi@yahoo.com
9	Mr. Ibrahim Elsadig Ibrahim	Agricultural Resarch Cooperation - Kassala	DG	
10	Mr. Ali Isa Hassan	Ministry of Agriculture, Forestry & Irrigation	DG	0918053930
11	Mr. Abdel Gader Haj Ali	Ministry of Agriculture, Forestry & Irrigation	Extension services,manage	0901971857
12	Ms. Ibtisam Ali Nimer	Ministry of Agriculture, Forestry & Irrigation	Horticulture manager	0916850072
13	Dr. Anwar M. Osman	Ministry of Agriculture, Forestry & Irrigation		0911327465
14	Dr. Mansour Babiker	Kassala Uni.	Dean - Faculty of Engineering	0122908279
15	Dr. Hassan M. Ahmed	Kassala Uni.	Dean - Faculty of Economy	0912258382
16	Dr. El Hadi Isa	Kassala Uni.	Faculty of Engineering	0123852319
17	Mr. Karar Abdel Rahim Mohamed	Meteorology Dep.	Manager	0122022382
18	Mr. M. Ahmed M. Alamin Tirk	WUA, GAS	Leader	09122785641
19	Eng. Mahmoud Adam Mohamed	Higher Council WUA	Secretary	0912636326
20	Mr. Ahmed Mohamed Omer	WUA		0919022021
21	Mr. Birer Adrob Mustafa	WUA		0912813699

22	Mr. Mohamed Osman Karm Alla	Fruits and Vegetables Union	President	0912278576
23	Mr. Ali Elzein Alaabdeen	Fruits and Vegetables Union	Deputy	0912210593
24	Mr. Osman Mohamed Mahsos	Fruits and Vegetables Union		0912676190
25	Mr. Ahmed Humed Barsi	Pastoralism's Union		0911262776
26	Eng. Abdel Hakeem M. Elhassan			0912320682
27	Ms. Badria Alamin	Women's Union		0912888820
28	Mr. Amir Babo Rafay	Civil Organizations, Plan Sudan		
29	Mr. Zu Elgfar Ismail	Civil Defence	Deputy manager	0912819554
30	Mr. Hashim M. Abdel Latif	National Water Corporation - Kassala	DG	0916406660
31	Khadiga Mohamed Abbkar	Non-gov. organization		0912333123

Table (2): International Experts

No.	Name	Organization	Position	Contact
1	Dr. Franciscus van Steenberg	MetaMeta/ SpNF	Managing director	fvansteenbergen@metameta.nl
2	Mr. Matthijs Bram Kool	SpNF	Researcher	mkool@metameta.nl
3	Dr. Abraham M. Haile	UNESCO-IHE	Senior lecturer and researcher	A.MehariHaile@unesco-ihe.org
4	Dr. Fransiscus X. Suryadi	UNESCO-IHE	Senior researcher	f.suryadi@unesco-ihe.org
5	Mr. Ewout J. Heeringa	UNESCO-IHE		E.Heeringa@unesco-ihe.org

Table (3): HRC Staff List

No.	Name	Organization	Position	Contact
1	Prof. Yasir A. Mohamed	HRC	DG	y.mohamed@hrs-sudan.sd
2	Mr. Abu Obieda B. Ahmed	HRC	Senior researcher	hrs_abdo@hotmail.com
3	Ms. Amira Mekawi	HRC	Researcher	hrs_amira@hotmail.com
4	Mr. Ahmed Hayaty	HRC	Researcher	ahmedhayaty@live.com
5	Mr. M. Kabeer	Groundwater	GW specialist	Mkabir5@yahoo.com
6	Mr. Elnoor H. Etayeb	HRC	IT engineer	elnooor@hotmail.com
7	Ms. Tahani Gadalla	HRC	Media coverage	

List (1): All research proposals as raised by the stakeholders in GAS

1. زمن الري وكمية المياه المناسبة للمحصول المحدد (30-20-15 يوم).
2. تقسيم وتسوية المساقى بتقليل مساحتها وذلك لتسهيل الري ورفع كفاءة استخدام الماء داخل الحقل.
3. تنويع المحاصيل وإدخال محاصيل نقدية تتناسب مع تقنية الري الفيضي.
4. توزيع وإدارة مياه الري أثناء الفيضان من الفم الرئيسي حتى المسقا.
5. معالجة مشكلة الإطماء بالفموم (فوتا ، مكلى ، هدايا).
6. تعميم روابط مستخدمي المياه علي تفتيش هدايا.
7. استخدام المكننة و التقنيات الحديثه فى الزراعة.
8. التحضير المبكر والجيد للموسم الزراعي وإزالة المسكيت.
9. عمل دراسات استراتيجيه طويله المدى لتطوير ونجاح المشروع.
10. مراجعة تقنيات ترويض نهر القاش لتقادي الكسورات للاستفادة من مياه النهر.
11. عمل منشآت مفيض لتقادي أخطار الفيضان.
12. التنسيق بين الجهات ذات الصلة المهتمه بإدارة المياه والزراعة.
13. رفع التوعيه لإنسان القاش باهميه المياه والمنشآت وزيادة معرفته بإدارة المياه.
14. تفعيل المرأة الريفيه وتطوير طرق كسب المعيشة وإيجاد موارد لتمويل المشروعات الصغيره والكبيره، وتدريبها والعمل علي تبادل الخبرات مع المجتمعات الأخرى.
15. تقييم التجارب السابقه لمعرفة الأسباب السالبة التي تجعل المجتمعات لا تستفيد من التدخلات السابقه لتحسين سبل الكسب لرفع مستوى المعيشة.
16. استخدام تقنيات حصاد المياه في (القاش داي) للاستفادة القصوى من المياه.
17. التغييرات المناخية وتأثيرها علي البيئه.
18. التنبؤ بالفيضان لتحسين استغلال المياه و تقادى الأخطار.
19. إدارة المياه الجوفية.