MINUTES OF THE MULTI-STAKEHOLDER PROJECT INCEPTION WORKSHOP HELD AT PARADISE HOTEL IN KHARTOUM, SUDAN FROM 18TH TO 20TH JULY, 2022

Present

See the participants list attached.

Agenda

- Introduction of RCMRD, NRGD and CTCN Project (activities and deliverables)
- Deliberations on stakeholder mapping
- Identification of project sites and practical arrangements
- UAV mapping
- Mainstreaming gender in the CTCN Project activities

MIN 1. Introduction

After recitation of the holy Quran and brief speeches from CTCN, NRGD and RCMRD representatives, the meeting was officially opened by Dr. Abubaker Omen Elbushra, the Undersecretary, Ministry of Agriculture and Forests. — Dr. Abubaker Omen Elbushra who underpinned the essence of this project in helping the Sudanese government through the relevant ministries and government departments in achieving food security. He also emphasized the importance of improving and increasing the agricultural productivity through precision agriculture by applying current innovations, including but not limited to UAV's.

MIN 2. RCMRD's presentation

This followed immediately after the group photo was taken and the presentation was made by Mr. Edward Ouko. In his presentation, he highlighted the Centre's vision, mission, goals, core values, activities and service offered, as well as its membership. Mr. Ouko emphasized that Sudan was a member state of RCMRD; hence, could benefit from RCMRD's services, such as trouble-shooting and repair of equipment free of charge as long as it made a formal request to the Centre's Director General.

MIN 3. Stakeholder mapping

This activity had already been accomplished by NGRD. So, the meeting just noted the collaborating institutions, their representatives and roles in the project.

MIIN 4. Identification of sites, field work and laboratory analysis

The deliberations here focused on where the work will be conducted, soil data collection, analysis and validation, including the sampling strategy, sample preparation, lab analysis, and classification. The participants agreed on the following:

- That the work will be implemented in the Nile State, but specifically in Al Damar administrative unit (~10,866 Km²). This administrative unit was selected because it is prone to wind and water erosion, the spatial variability of soils is high, hosts one of the four government-funded food security projects, has been affected by climate change and desertification, has baseline data that was collected by previous projects (e.g., ACSAD 2019), has many beneficiaries, and being the capital of Nile State, support from the state government is guaranteed;
- That field activities will be conducted in October/ November by a team of soil specialists and technical officers from NRGD/ ARC, and will entail soil augering (~ 200 auger points), siting of profile pits (~ 40 pits), soil sampling and soil erosion assessment;
- That the food security project site within Al Damar will be surveyed at semi-detailed level, meaning more auger points (~ 100 points) and profile pits (~ 40 pits) will be dug at the site, and the remaining points will be evenly spread across Al Damar taking into account the physiographic differences;
- That protocols will be prepared to clearly describe and document the processes. These will also serve as knowledge products from the Project. Field survey manual will be prepared by NRGD/ ARC and will describe how the soil survey will be conducted, including the office preparations to the sampling strategy, equipment required, siting the profile pits, augering, soil sampling and classification. The sample preparation and analysis protocols will be prepared by NRGD and will describe the lab procedures, while the soil erosion assessment protocol will describe how the type, extent and severity of erosion will be evaluated. The latter will be based on the land degradation surveillance framework (LDSF) that was developed by ICRAF World Agroforestry Centre in Nairobi.
- That the above manuals and protocols would be shared with RCMRD (Mr. Ouko) within a week after the inception meeting;

- That the soil analysis will be done immediately after field work at the central soil lab, and the results will be ready in January. The parameters to be analyzed will range from soil texture, organic carbon, pH and ESP to EC, CEC, NPK and micro-nutrients;
- That after soil analysis, the spatial patterns of selected soil parameters, as well as of soil
 loss rates will be modelled and mapped digitally on google earth engine platform using
 RUSLE and scorpan frameworks. Capacity building on modelling would also be
 undertaken.

MIN 5. UAV Mapping

The discussions on the UAV revolved around identification of the sites for UAV mapping, the appropriate time for mapping, getting permission to use the UAV from the relevant Sudan authority, and capacity building. From the discussions, the following points were taken:

- Permission was required from the Survey department to use the UAV in Sudan. RCMRD would need to submit the specs of the UAV, disclose the area to be mapped, and after the mapping, submit a copy of the data gathered to the department;
- Getting permission to use the drone in Sudan was however a lengthy and difficult process;
- The ministry of Agriculture and Forests department in Al Damar had a drone that was small in size, while HCENR had a bigger one, but no trained pilots;
- If getting RCMRD drones into Sudan was not possible, then the two drones that are
 available could be used but the UAV expert from RCMRD must be the one to operate
 them. This is because field campaign will only be conducted once; hence, the team cannot
 afford to make mistakes while collecting the requisite data;
- Dr. Hatim from the Remote Sensing & Seismology Authority (RSSA) National Centre for Research will test the two UAVs and ascertain their fitness for field data collection, while Mr. Ouko will consult further with RCMRD on the feasibility of using the drones available in Sudan as an alternative plan.
- There was a need to conduct UAV training to fill the obvious skill gap. The training should be in-person and focus on data collection, processing and analysis. It was agreed that this would be conducted in October concurrently with the field campaign.

MIN 6. Gender mainstreaming

The gender mainstreaming session was facilitated by Ms. Jackline Nnassuna from RCMRD. The

aim was to create awareness about integration of gender issues into the Project. She started by

defining various concepts and terms, such as gender, sex, gender roles, norms and relations,

gender equality, equity, discrimination and exclusion, and inter-sectionality. With regard to

climate change (CC), Ms. Nnassuna pointed out that men and women use natural resources

differently; hence, they are affected differently by the changes in climate and natural resources.

That is, the impacts of CC are gender-differentiated. Therefore, the adaptation or mitigation

measures should be gender-responsive rather than gender-neutral. In analyzing gender issues in

the CTCN Project, Ms. Nnassuna will be guided by the gender action plan and will, specifically, be

looking at each activity in terms of:

The roles and responsibilities assigned to men and women;

• Time use;

Division of labour;

Participation in decision-making; and

Access to resources (e.g., equipment)

MIN 7. Adjournment

There being no other business, the meeting was officially closed by Dr. Sawsan, Director General

- NGRD, on Wednesday 20th July, 2022 at 3:30 pm.

Minutes approved for circulation

Sign:

Mr. Edward Ouko (Project Leader)

List of Participants

#	Name	Name of the	Position	Specializati	E-mail	Mobile	Gender
		Organization		on			
1.	Dr.Sawsan Khair Elsied Abdel Rahim Mustafa	NRGD /Ministry of Agriculture and Forests (MoAF)	DG NRGD, GGW focal point	NR & Environment	sawsanatkh@ya hoo.com	+249 912559438 +24991164 38063	F
2.	Dr. Mohammed Abdallah Alsheikh	Institute for Desertificatio n and Desert Cultivation Studies University of Khartoum (U of K)	Director	Soil Scientist	mohmedelsheik h@gmail.com	+24912384 5688	M
3.	Dr.Adil Mahgoub Farah	Dryland centre of Agriculture research Cooperation (ARC)	Researche r	Soil Scientist	adil.m.farah@ar c.gov.sd	+24991830 1143	М
4.	Hatim Elobied	Remote Sensing & Seismology Authority(RSS A) National Centre for Research	Researche r	RS& GIS specialist	Hatimoo22@ya hoo.com	+24990436 6220	M
5.	Ali ALkhazin Ali Yousif	Shandi Research Station RC River Nile state	Researche r	Soil specialist	alialkhazin@yah oo.com	+24992296 8605	М
6.	Dr.Reem Ahmed housan	NRGD/ MoAF	Head of Informatio n Dep.	Soil specialist	reemahmed28 @hotmail.com	+24992734 2612	F
7.	Mohamed Suliman	NRGD /MoAF	Head of Soil Laborator Y	Soil specialist	mohaalkhwaja@ gmail.com	249911322 240	М

8.	Amged Tageldin	Great Green Wall Office /NRGD/ MoAF	Technical	RS& GIS specialist	amooaltalir@gm ail.com	+24991233 49997	
9.	Huyam Ahmed	HCENR	CTCN Focal point	Environme ntalist	Hoyamahmed66 @gmail.com	+24990827 3803	F
10	Esra Edrees	HCENR	Combat desertifica tion staff	Environme ntalist	israaxp@gmail.c om	+24991211 5026	F
11	Dr.Mohamed Salih Dafalla	Faculty of Agriculture U of K	Head of agricultura I training extension unit	Soil Scientists and RS& GIS	mohmedsalihdaf alla@yahoo.com	+24912384 5688	М
12	Fatima Mohamed	River Nile State	Soil specilist	Soil specilist	israax@gmail.co m		F
13	Rehab Abdelmaged	HCENR	Director Climate Chanhge	Cliamate speciLIST	rehab499@hot mail.com	+01289324 15	F
14	Amna Jubara Ali	NRDG_MOF	Director Dersertific ation			+09122549	F
15	Shaza Elbaloula	NRDGM	Gis Special list	GIS	Rozlinda@re	+09202966 75	F