

MINISTRY OF AGRICULTURAL ANIMAL INDUSTRY AND FISHERIES

IRRIGATION FOR CLIMATE RESILIENCE PROJECT (ICRP) (P163836)

TERMS OF REFERENCE

FOR

EXTENSION SERVICES AND IMPROVING ACCESS TO AND USE OF QUALITY AGRO-INPUTS IN KABUYANDA IRRIGATION SCHEME (ISINGIRO DISTRICT)

March 2021

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1.0 INTRODUCTION

The Irrigation for Climate Resilience Project (ICRP) aims to support the shift towards more resilient agriculture through the development of sustainable irrigation services. Access to irrigation is critical to allow farmers coping with climate variability, to increase yield and intensification, and diversify towards higher value crops. The project will address Uganda's climate change vulnerabilities by: (i) promoting adoption of irrigation by smallholder farmers, in synergy with other agriculture inputs and technologies; (ii) increasing water storage capacity; and (iii) promoting sustainable catchment management. This change will be market-driven, with irrigation becoming the anchor for stronger producer organizations and development of value chains.

The Government of Uganda through a credit from the International Development Association (IDA) will finance the cost of the Agricultural value chain development under the ICRP (P163836) Project. The project will adopt an approach that bases on the strategic vision that sustainable irrigation infrastructure operation and services depend upon helping farmers turn agriculture into a profitable business. The project will be implemented by the Ministry of Water and Environment (MWE), with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) as technical implementation partner.

This project is divided into three main components; Component 1 will support Irrigation Infrastructure development and will develop Irrigation and drainage infrastructure primarily for supplemental gravity irrigation services. Component 2 aims to provide essential support services for agricultural production and value-chain development. This component will be necessary to fill critical gaps in provision of essential support services for crop production and value-chain development and will be implemented by MAAIF. Component 3 will undertake Institutional Strengthening and Implementation support. This is to support development and strengthening irrigation management institutions through technical assistance, capacity building and implementation support.

1.1 Essential support services for agricultural production

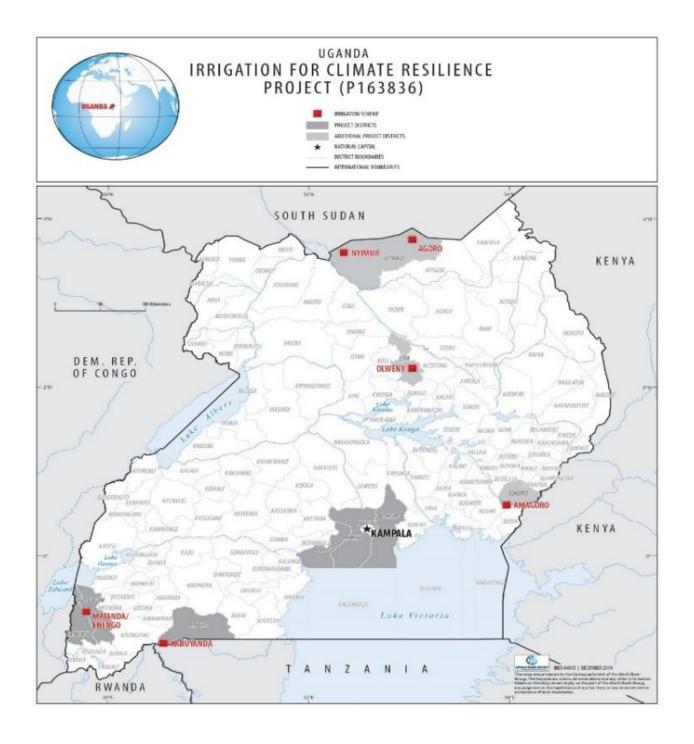
The irrigation infrastructure development is aimed at providing water for production that would improve agricultural production, productivity and profitability of the supported agricultural enterprises. The enterprises should be able to produce products that are competitive both in the local and regional markets in order to generate enough revenue that would enable them to support the operations and maintenance of the infrastructure sustainably while at the same time improving the farmers profitability for improved livelihoods. The farmers in the command area will require essential support services that include strengthening their groups/cooperatives for better access to quality inputs and appropriate technologies or practices with the aim of improving production and productivity.

Component 2 aims at building capacity of targeted farmers in agricultural production and productivity, agro-processing and value addition as well as marketing of selected enterprises. The support will target production, postharvest handling, agro-processing and market access. This component will be implemented through a combination of consultancies services and matching grants. Consultancies services are going to be under the present TOR, and a separate TOR for Value addition and market linkages.

1.2 DESCRIPTION OF THE PROJECT AREA

Kabuyanda Irrigation Scheme is a new irrigation scheme with a command area of about 3,660 Ha. Irrigation will be in the form of development of a gravity piped irrigation network with water delivered at the farm-gate (or shared between farms in case of farm area below 1 ha) with pressure sufficient to carry out sprinkler or drip irrigation. The irrigation infrastructure is organized in 20 ha blocks. Works for the irrigation network are expected to start in 2020 and completed in 2024. The residents are currently engaged in a variety of agricultural enterprises, namely, bananas, beans, Irish potatoes, maize, sorghum, cattle and goats. Extension and advisory services provision is inadequate and mainly focused on rainfed farming. Since the restructuring of the National Agricultural Advisory Services (NAADS) and the closure of the Millennium Villages Project (MVP) operations, there are barely three initiatives through which farmers are able to access advisory services. The district has recruited one extension worker for each of the key areas, including crop, livestock, fisheries and commercial development for each sub-county. In addition, there exist some NGOs/CBOs, which are currently providing extension and advisory; and agribusiness development services in the district. The Farmer institutions in the area include producer groups, cooperatives and SACCOs. The cooperatives have mandates ranging from production of seed in collaboration with National Agricultural Research Organization (NARO), linking farmers to agro-inputs; bulking, storing and marketing of produce; as well as providing financial services. The farmer institutions would benefit from further institutional and agribusiness development for improved governance and commercialization of their enterprises. Whereas, some of the cooperatives are legally registered under the Cooperatives Act, a few of them are registered by the District Commercial Office. Financial services providers include commercial banks, micro-financial institutions and SACCOs for savings and credit; and Airtel for mobile money services. The agricultural produce is mostly consumed locally, both within the district and within the country. The surplus of the food crops namely beans, Irish potatoes and sorghum are traded beyond the national borders in Tanzania, Congo, Burundi and Rwanda. The marketing cooperatives have specialized in handling maize and beans though they have the capacity to include other crops such as coffee. Market prospects exist not only for the currently produced commodities, but also those with potential. The high refugee population in the Nakivale and Oruchinga settlements offer big market prospects for all the food crops as well as livestock products.

LOCATION MAP FOR KABUYANDA IRRIGATION SCHEMES



2.0 OBJECTIVES OF THE ASSIGNMENT

The main objective of the assignment is to provide relevant extension services to farmers in the Kabuyanda Irrigation Scheme for irrigated agricultural practices, sustainable land and on-farm water use management and scheduling, food and nutrition security; and improved access to and utilization of quality agricultural inputs and machinery.

2.1 Specific objectives

- 1. Provide the needed assistance to the existing extension agencies in the targeted irrigation scheme to establish and implement an intensive and effective extension support to assist the targeted farmer groups in making optimal use of the irrigation facilities provided by the project under component 1.
- 2. Train District Local Government field extension workers to technically backstop and provide needed (extension) support to lead farmers, representing the different farmer groups in the irrigation scheme, in providing supplementary irrigation, onfarm water use management and scheduling, soil (fertility) management, additional knowledge and skills in good agricultural practices for increased production and productivity; improved food and nutrition security and sustainable land management practices.
- 3. Demonstrate and assist farmers in the selection and organizing the joint purchase through the project matching grant facility of the proper on-farm irrigation equipment.
- 4. Train and support one or two lead-farmers per farmer group to facilitate extension support to their group members through Farmer Field Schools (FFS) on different potential crops that will benefit from supplementary irrigation in combination with on-farm demonstrations and exchange visits.
- 5. Improve farmers' access to and utilisation of quality agricultural inputs.

3.0 SCOPE OF WORK AND DETAILED TASKS

3.1 Geographical scope

The assignment is to be undertaken in Kabuyanda Irrigation Scheme in Isingiro District, Western Uganda. A total of 13,373 households/farmers in 535¹ farmers' groups, representing farmers in 20 hectare block of the irrigation scheme sharing the same hydraulic infrastructure, will be targeted as direct beneficiaries.

¹ An average of 25 farmers in a FG

3.2 Technical scope

The Consultant (TA) will work closely with the Directorates of Crop Resources and Agricultural Extension Services and their departments; as well as the Agricultural Infrastructure, Mechanisation and Water for Production to deliver on these key outputs in the Irrigation schemes. The consultant will be required to prepare training materials, produce training manuals/booklets and IEC materials for extension service, access to quality agro inputs and access to matching grant during the course of the assignment. For each task the consultant will prepare a draft report, hold a consultative stakeholders workshop, and then prepare the final report which will be reviewed by MAAIF.

3.3 Detailed tasks

Objective 1: Provide the needed assistance to the existing extension agencies in the Kabuyanda irrigation scheme to establish and implement an intensive and effective extension support to assist the targeted farmer groups in making optimal use of the irrigation facilities provided by the project under component 1.

Task 1.1 Assessment of the extension system, the available extension capacity, as well as the extension needs on the farmers' side.

The consultant is expected to assess the status of the national agricultural extension system to provide insights on the strength and constraints of the public and non-governmental extension system, the institutional and enabling environment for extension to operate. The consultant will also identify the extension needs of the farmers and provide the most suitable extension approaches to deliver appropriate extension services. The task will also include making an inventory of the number and type of governmental and non-governmental (NGO) field extension staff available in the irrigation scheme, their actual availability (willingness and percentage of time) to provide active extension support to farmers in an integrated extension strategy supported by the project.

Task 1.2 Development of a detailed extension plan

Based on the inventory the consultant will develop a detailed extension plan for the irrigation scheme. The objective of the extension plan is to provide male and female farmers in the irrigation scheme with the needed extension support to make optimal use of the irrigation infrastructural investments by selecting the right crops for irrigation, proper use of irrigation water and to grow an economically optimal crop. In doing this, the consultant does have to keep in mind that most of the farmers are only used to rain fed agriculture and irrigated farming is a total new experience with implications on land preparation, soil, soil fertility, water, pest and crop management as well as harvesting and post-harvest handling. This requests intensive extension support that the few field extension staff available at the irrigation scheme will not be able to provide alone. This means that each farmer group will

have to identify one male and one female farmer as lead farmers, which the consultant will train to facilitate the extension support to their male and female group member farmers.

The Consultant will prepare a detailed work plan for the first two years, when and how to:

- a) Together with the engineers from MAAIF and the water for production department in MWE involved in component 1 and field extension workers, based on the planned design and scheme layout showing the plot arrangements within the irrigation scheme, where need be participate in the establishment of farmer field school Groups together with Technical Assistance team under Component I for the Development and establishment of scheme management model in which it is expected that groups each of 25 farmers, representing each one farming household with neighbouring fields and joint watering points will be formed in the same 20 hectare irrigation block for extension support and to undertake joint scheduling of irrigation water in close collaboration with the water governing institutions.
- b) Participatory selection by each farmer group of a male and female lead farmer from each farmer group;
- c) In collaboration with the Value chain consultant, identify with the selected lead farmers and available field extension officers the potential crops that will be grown with (supplementary) irrigation in each of the different blocks in the irrigation scheme and will need intensive extension support;
- d) identify and develop, in close cooperation with the extension department of MAAIF, the respective cultivation manuals/extension materials that will needed and be made available by the consultant;
- e) Develop and conduct the needed training of the available field extension officers in the irrigation scheme to technically backstop the lead farmers and provide them with the needed (extension) support;
- f) Develop and conduct the needed training of lead farmers to facilitate the extension support to their group male and female member farmers;
- g) Assist farmers in the selection and organizing the joint purchase through the project matching grant facility of the proper on-farm irrigation equipment
- h) Provide the needed support (Agricultural inputs for the FFS learning fields and learning materials, technical backstopping), in close cooperation with the public extension officers, to the lead farmers to actually facilitate the extension support (FFSs, on-farm demonstration and exchange visits) to their group member farmers;
- i) In collaboration with the Value chain consultant, improve farmers' access to quality improved agricultural inputs.

Objective 2: Train extension workers to technically backstop and provide needed (extension) support to lead farmers, representing the different farmer groups in the irrigation scheme, in providing supplementary irrigation, on-farm water use

management, soil (fertility) management, additional knowledge and skills in good agricultural practices for increased production and productivity; improved food and nutrition security and sustainable land management practices

Task 2.1 Training of Field extension officers

The Consultant will train identified Field Extension Workers at District and Sub-county level, in technical backstopping and in providing the needed (extension) support to lead-farmers.

The Field Extension Workers will be trained to impart the following skills:

- i. Training and facilitation skills
- ii. Good agronomic practices in irrigated agriculture for a number of relevant crops in the irrigation scheme
- iii. On-farm Sustainable Land Management
- iv. On-farm water use management, supplemental irrigation, irrigation scheduling for different relevant crops in the irrigation scheme
- v. Integrated pest management for the different relevant crops in the irrigation scheme
- vi. Food and Nutrition sensitive agriculture
- vii. Farmer to farmer knowledge transfer (FFS, exchange visits, etc.)

The details of the training topics (ii – vii) are as detailed in Objective 3 below.

The consultant is expected to apply proven methods and tools to impart the knowledge and skills to ensure efficiency, sustainability and gender main-streaming in the activities.

Objective 3: Demonstrate and assist farmers in the selection and organizing the joint purchase through the project matching grant facility of the proper on-farm irrigation equipment.

Task 3.1 Establish and maintain 3-4 demonstration plots on irrigated farming

To sensitize and make the farmer better understand what irrigated farming means and what the possible on-farm irrigation practices are the project can help them to adopt, the consultant will establish 3-4 demonstration plots, pumping water from the river and demonstrating different on-farm irrigation practices as drip, sprinkler and hose irrigation under different crops. The Consultant will establish these demonstrations, in close consultation with the irrigation experts of the MAAIF and MWE, two seasons before the actual irrigation system has been completed and water can be made available on the farmer's fields in the different irrigation blocks.

Task 3.2 Organizing field days at the different demonstration plot for extension officers and farmers

The Consultant will actively make use of the demonstration plots in training the public extension officers, lead farmers and, when lead farmers have started facilitating their FFSs, to host their FFS groups at least once per cropping season for learning purposes.

Task 3.3 Assisting FFS groups in the selection and purchasing request for the proper onfarm equipment through the matching grant arrangements of the project

The consultant will, in close coordination with the local field extension officers, assist the FFS groups to select the proper on-farm equipment for their specific situations of their fields and crops and to prepare a joint request together with the other FFS groups in the same block for the equipment through the matching grant process to the Matching grant manager of the project.

Objective 4: Train and support two lead-farmers per farmer group to facilitate extension support to their group members through Farmer Field Schools (FFS) on different potential crops that will benefit from supplementary irrigation in combination with on-farm demonstrations and exchange visits

Task 4.1 Training of Lead farmers

The Consultant will work with the trained (Public) Field Extension Workers to train and support lead farmers to facilitate extension support to their group members through Farmer Field Schools (FFS) on different potential crops that will benefit from supplementary irrigation in combination with on-farm demonstrations and exchange visits.

The consultant will train 1,070 lead farmers, one female and one male per group, as FFS facilitators on the different relevant crops through three-week intensive internal training courses (Basic Training of FFS facilitators-ToF) before the start of the cropping season and monthly follow up training sessions during the first crop season when the lead farmers are facilitating their FFSs for the first time. After the first season the lead farmers will continue to receive from the consultant refresher trainings once a year. During the ToFs and follow up trainings the consultant will train the lead-farmers to:

Facilitate FFSs on the respective irrigated crops in the irrigation scheme

- a) Prepare and initiate FFS (preparatory meetings with the farmer group)
- b) Participatory identification of focus crop and main challenges FFS should address
- c) Organizing the FFS (location leaning field, session days/time, membership)
- d) Facilitation skills, FFS session program, FFS curriculum
- e) Experiments in learning field, AESA, Special topics
- f) Monitoring, Evaluation and Learning (MEL)

Good Agricultural Practices (GAP) in the targeted crops in the irrigation scheme

- a) Train lead farmers on good agricultural practices for crop production and pasture development
- b) Set up experiments for the FFS learning fields to practice and learn the good agricultural practices for crop and pasture production
- c) Incorporate special topics on GAP in the FFS curriculum

Training on On-farm Sustainable Land Management (SLM)

- a) Soil and water conservation practices
- b) Train (lead-)farmers on specific on-farm SLM practices
- c) Include SLM practices in the experiments in the FFS learning field
- d) Carry out soil sampling and nutrient analysis to guide effective fertilizer usage by farmers
- e) Train farmers on effective fertilizer use (Fertilizer/ Water requirements) to maximize yields per unit area
- f) Incorporate special topics in the FFS curriculum on SLM and effective fertilizer use

Training on Irrigation Agriculture

- a) In conducting together with the FFS farmer group a stakeholder engagement about the interventions and the roles and responsibilities of the different stakeholders in organizing the distribution of irrigation water to their agricultural fields
- b) Appropriate on-farm irrigation technologies in relation to the different crops grown
- c) Frequency and amount of water supply for the different crops grown
- d) Set up proper irrigation system in the FFS-learning field
- e) Train (lead-)farmers on maintenance and simple repair of irrigation equipment, spare parts and accessories for the different on-farm irrigation systems
- f) Train (lead-)farmers on water use efficiency in relation to the crop productivity within the irrigation scheme
- g) Incorporate special topics in the FFS curriculum on establishment, operation and maintenance of on-farm irrigation systems/technologies in relation to the different crops grown

Food and Nutrition Security

- a) Assess Food and Nutrition Security situation within the farmer groups and around the schemes
- b) Train (lead-)farmers for Nutrition sensitive attitude change
- c) Train (lead-)farmers on Nutrition sensitive agriculture and enterprise mix as a means of integrating Nutrition into Agriculture and to consider using part (+-10%) of the irrigated land for family farming
- d) Train (lead-)farmers on Nutrition/ Healthy Diets & Resource planning at Household levels

- e) Train (lead-)farmers on Food Safety and its benefits to Household nutrition
- f) Incorporate special topics in the FFS curriculum on these different food and nutrition security issues

Task 4.2 Assist the trained lead-farmers in establishing and facilitating FFSs with the other member farmers in the farmer groups

After the Basic ToF, the Consultant will be responsible for ensuring transfer of knowledge from the trained lead farmers to the other farmers by making it possible for the lead farmers to establish FFSs for at least 3 cropping seasons for each of the estimated 535 farmer groups and by technically backstopping of the FFSs with the help of the trained field extension workers. This means making available the needed agricultural inputs for the FFS learning fields and learning materials as for example flipchart paper, markets, notebooks and pens for each FFS season (3x535=1605 FFS seasons with on average 16 sessions/season resulting in a total of 25680 half-day FFS sessions with on average 25 male and female farmers), as well as regular backstopping visits to the different FFS sessions in close coordination with the (public) field extension workers.

Objective 5: Improve farmers' access to and utilisation of quality agricultural inputs

The consultant will support the development of the input distribution network to improve farmers' access to quality commercial agro-inputs. In addition, the consultant will build the capacity for community-based production of quality certified planting materials. The planting materials will include vegetative planting materials. Specifically, the Consultant will carry out the following:

Task 5.1: Assessment of the Agro-input supply and distribution system at scheme level

a) Mapping of key players in the input distribution network

Identifying and mapping all key players in agro-input distribution system including importers, wholesalers, stockists/retailers at National, Regional and local levels. Bio data about the key players in the agro-input system will be taken and a database created and maintained.

b) Analysing the Agro-input market

The TA will conduct agro-input market analysis to determine the commonly available agro-inputs by category and the market prices for inputs and develop input packages to guide farmers for effective and efficient use of critical farm inputs to increase production and productivity of target commodities. The gap between demanded and available inputs will be identified as well as the constraints faced by agro-input dealers in availing the agro-inputs.

c) Assessing capacity gaps in the input production and distribution system

The TA will be expected to conduct capacity needs assessment for key players along agroinput marketing system including; knowledge in safe use and handling, business skills, disposal of agro-inputs, and storage requirements.

Task 5.2: Strengthening of the Agro-input supply and distribution system at scheme level

a) Sensitizing and strengthening Agro-input dealers associations

The Service provider will be responsible for strengthening existing agro-input dealers associations or networks through sensitizing and training. This is to make it attractive for national and international agro-input companies to deliver their inputs to the scheme for further distribution through the association members.

- b) Training local agro-input dealers and farmers in safe use and handling of agro-chemicals. The Consultant will bridge the capacity gaps in the agro-input marketing system by building the capacity of farmers, agro-input dealers/or associations in safe use and handling of agro-chemicals.
- c) <u>Training agro-input dealers on the importance of organizing themselves in groups</u>
 The agro-input dealers will also be trained on how they can benefit from the fact that the project is supporting farmers to organize themselves in groups and that the input dealers could benefit from the created quantity of scale.

Task 5.3: Increasing access to high quality seeds and seedlings

a) <u>Development of a strategy to increase accessibility in the scheme to high quality seeds</u> and seedling for the respective crops grown in the irrigation scheme

The consultant will facilitate a participatory process in the scheme to identify the limitations at scheme level to access high quality seeds and seedling. Based on the assessments and with the support of the relevant extension officers and input suppliers the consultant will prepare a strategy to improve the accessibility at scheme level to higher quality seeds and seedling.

b) Training of Agricultural Extension Officers in inspection of planting material

In close consultation and coordination with MAAIF Department of Crop Inspection and Certification, the consultant will be required to retool Agricultural Extension Officers on diagnostics and inspection procedures for all planting materials. This is aimed at strengthening inspection, quality assurance and increasing traceability of agro-inputs along the distribution system. In addition, the TA will also build the capacity of Agricultural Extension Officers on Safe use of Agro-inputs to strengthen support supervision and monitoring of agro-input market distribution chain from national, regional to local levels and hence improving on compliance to legal requirements by agro-input dealers.

c) <u>Training of farmers in identification of quality planting and stocking materials</u>

The consultant will train the lead farmers also on quality of planting and stocking materials, seed viability testing, seed storage requirements, and selection of quality vegetative planting materials, and developing necessary IEC reference materials for guiding the lead farmers in facilitating these topics during their FFSs with their farmer group members. This will be done in close collaboration with MAAIF departments of Crop Inspection and Certification, Crop Production, Directorate of Fisheries Resources and Directorate of Agricultural Extension services.

General duties

<u>Information dissemination and Communication</u>

The Consultant shall prepare and produce extension materials for information and education during provision of extension services and advocacy. For adequate extension and communication, materials will be produced annually per scheme throughout the contract period. This will include:

- a) Developing Extension materials for (lead-) farmers leaflets, letters, posters, flyers, charts, crop calendars.
- b) In liaison with the MAAIF, develop content and disseminate the materials through Radio and TV talk shows, print media
- c) In liaison with the MAAIF, produce a video documentary of the project activities and case studies
- d) Develop, produce and disseminate other communication materials on irrigation and irrigated agriculture for the benefit of farmers (including materials for key crops to be irrigated, for the irrigation methods etc.). Farmers will be mainly reached through awareness raising events, agriculture fairs, radio, press and printed advertisements, program brochures, videos, and social media posts.

Promote equity in agriculture activities

In the execution of the duties, the Consultant will ensure that they promote gender equity in access to extension services. The youth, women, elderly and vulnerable should all participate as well as ensure that their interests and needs are taken care of especially access to matching grant, access to inputs and extension training services, .

Carry out documentation of the lessons learnt during the agronomy support period

The Consultant shall ensure proper documentation of all the activities that will be carried on the farmers' fields; key emerging lessons and; case studies of both success stories and challenged cases during implementation of activities. The consultant will therefore be expected to maintain proper records for all activities and processes.

To assess, monitor and supervise project activities

The consultant will continuously assess, monitor and supervise the project activities to ensure timely and effective activity implementation. Areas that require improvement will be identified and remedial measure taken timely.

4.0 ORGANIZATION OF THE ASSIGNMENT

4.1 Assignment Implementation Modalities and Facilitation

For ensuring organizational and Stakeholder wide appreciation and ownership of the proposed assignment, the consultant shall be required to organize coordination of workshops/meetings for presentation of key reports after each project milestone to a representative group of stakeholders that is to be agreed with the client. The Consultant will be required to include a provisional sum of 110,079 USD to meet costs of holding the workshops and meetings. The Client will pay the Consultant based on actual and approved expenditure of the Consultant's budget (for workshops and meetings) which will have been discussed and agreed to prior to commencement of the Consultancy. The basis for payment of participants by the Consultant will be full participation for the entire duration of the workshop together with an authentic invitation letter of the participant. The workshops/meetings are expected to be held at the District level and Sub County levels. A total of 90 participants at District level and 30 at Sub County level shall be expected to attend each workshop and or meeting.

Approximately 20 workshops/ review meetings (5 district level stakeholders engagement and review workshops; 15 Sub county level stakeholders' engagement workshops) is proposed for the stakeholder engagement workshops to ensure relevant services are provided for sustainable on-farm water use management, food and nutrition security; and improved access to and utilization of quality agricultural inputs and machinery by farmers in the scheme. These workshops will be organized by the consultant based on the agreed work plan and methodology during the technical proposal and as reviewed during inception phase with the client. The consultant shall budget and handle prior facilitation to the activities and recover the expense during certificate invoicing. At each workshop, the consultants will make Power Point presentations, prepare workshop/meeting documentation, required information, provide concise background documents for discussion and prepare workshop reports to document the proceedings with activity implementation proof in form of photos.

The Consultant will quote all relevant inputs for the technical and support staff to cover: Professional fees, staff field allowances, professional input for stakeholder mobilisation,

sensitisation, training development and processing of information, education and communication materials and all other related financial logistics: field offices, vehicles, fuel, equipment and tools etc., as required to accomplish the assignment. Allowances and fuel for the client, district and central Government staff will be handled by the client.

The Consultant is further required to include another provisional sum of 1,125,237 USD to meet the cost of capacity building of extension workers (staff training), training of lead farmers (FFS facilitators) and training of service providers on input system delivery (farmer registration). The consultant will produce a program or a schedule for Training the Trainee for hands on training about Farmer Field School methodologies, demonstration, input system delivery etc. with specific skills related to implementation and the trainee will be provided by the client and the facilitation of the trainee will be borne by the consultant and be recovered from the client as per the agreed terms and costs during inception as part of the provisional sums.

Approximately 53 training sessions will be required for staff capacity building (extension workers); training of approximately 300 lead farmers on FFS facilitation for the entire duration for FFS training; TOT for service provider on input system delivery/farmer registration (1 training cycle). These capacity building and training activities will be organized by the consultant based on the agreed workplan and methodology during the technical proposal and as reviewed during inception phase with the client. The consultant shall budget and handle prior facilitation to the activities and recover the expense during certificate invoicing. For each activity, the consultants will make prepare training materials, documentation, required information and prepare activity reports to document the proceedings with activity implementation proof in form of photos.

The assignment is expected to be conducted in two phases over a period of four to five years. Phase 1 will run for 2 years and Phase 2 for 2 to 3 years. The selected Consultant will be hired for phase 1 (2 years). However, the consultant may be considered for Phase 2 upon successful completion of Phase 1.

4.2 Deliverables

- 1. Inception Report This shall be prepared and submitted within one month after the commencement of the contract. The Inception report shall include an understanding of the assignment including the methodology for implementation, tools, materials and schedules for implementation among others.
- 2. Quarterly /activity/performance reports This shall be submitted within a week after the end of each quarter. It will include activities executed including training undertaken, progress, and implementation issues identified among others

- 3. Progress reports This report shall outline the Consultant's work progress, consisting of the comprehensive account of the key activities and outputs done in the period as per the work plan of the consultant. There shall be First, Second and Third progress reports within the 2 years of implementation. These reports shall be submitted after every 8 months or as specified in the work plan.
- 4. Final/comprehensive report An acceptable end of contract report

The deliverables will be submitted to the Component 2 Coordinator (Support Services for Agricultural Production and Value Chain Development) for approval within a given period of time for that particular deliverable. All text will be prepared in Microsoft: Windows XP Professional, or Windows 2007/2010.

4.3 REPORTING REQUIREMENTS

Timing and reporting of all project activities will follow the routine Government of Uganda (GoU) reporting schedules.

The Project Implementation Unit (PIU) will coordinate, supervise and manage the assignment on a day to day basis to ensure effective and efficient implementation. The PIU will be represented by a designated technical team under MAAIF Component 2 will coordinate, supervise and manage the assignment.

The Service Provider shall report to the Project Coordinator – Irrigation for Climate Resilience Project (ICRP).

Attention: Component 2 Coordinator – Support Services for Agricultural Production and Value Chain Development.

All deliverables including work files, document files, databases, spreadsheets, drawings, and GIS data related shall be provided to the client in electronic format (on CD) upon completion of the consultancy, in addition to 6 copies of the hardcopy reports.

All assignment reports shall be submitted to the client in form of one (1) electronic copy and six (6) original hard copies. All documents to be submitted by the Service Provider shall be in English. Reports shall be delivered to the client's address as stated above with a copy to the World Bank Task Team Leader for ICRP.

The detailed schedule for the required reporting is contained in Table below.

Item	Description of Output	Timing from the Date of Contract Effectiveness
A.1	 Inception report for stakeholders' engagement and review Power point presentations for the draft inception report 	Month 1
	Draft inception report workshop	Month 1 + 1 Week
	 Final inception report incorporating stakeholder's comments 	Month 1 + 3 Weeks
A.2	 Quarterly progress reports (to be submitted on a quarterly basis, but for the first 3 – 6 months after Quarter 1 should be submitted monthly) 	Quarterly (monthly for the first 3 -6 months)
A.3	 First progress report for stakeholders' engagement and review. Power point presentations for the draft first progress report 	Month 7
	Draft first progress report workshop	Month 7 + 1 Week
	Final first progress report incorporating stakeholder's comments	Month 8
A.4	 Second progress report for stakeholders' engagement and review. Power point presentations for the draft second progress report 	Month 15
	Draft second progress report workshop	Month 15 + 1 Week
	Final second progress report incorporating stakeholder's comments	Month 16
A.5	 Third progress report for stakeholders' engagement and review. Power point presentations for the draft third progress report 	Month 23
	Draft third progress report workshop	Month 23 + 1 Week
	Final third progress report incorporating stakeholder's comments	Month 24

A.6	 Final report for stakeholders' engagement and review. 	Month 25
	 Power point presentations for the draft final report 	
	Draft final report workshop	Month 25 + 1 Week
	Final report incorporating stakeholder's comments	Month 26

The Consultant represented by the entire project team (key personnel) shall be required to present to stakeholders at separate workshops organized by the client upon submission of the Inception and Progress reports.

The five stakeholders' workshops (district level) will be conducted as indicated in the table above. The workshops will be organized to discuss the Draft Inception Report, Draft First Progress Report, Draft Second Progress Report, Draft Third Progress Report and Draft Final Report after submission of the deliverables to the client. The Sub county level stakeholder's engagement meetings shall be held prior to holding of district level stakeholder's workshop. The following shall be taken into consideration during the preparing and handling the stakeholders' workshop.

- (i) The consultant will make power point presentations, provide concise background documents for discussion and prepare workshop reports to document the proceedings.
- (ii) The consultant shall include in the financial proposal the costs of holding workshops and stakeholders' consultation.
- (iii) The client will pay the consultant based on actual and approved expenditure of the consultant's budget (for workshop) which will have been discussed and agreed to prior to commencement of the consultancy.
- (iv) The basis for payment of participants by the consultant will be full participation for the entire duration of the workshop together with an authentic invitation letter of the participant.
- (v) The key deliverable of stakeholders' workshop shall be stakeholders' workshop report which shall be submitted by the consultant within 2 weeks after the workshop.

5.0 Qualification of Firm and Key Personnel

5.1 Firm

The Consultant will be a firm with diversified technical competencies, including (but not limited to) agriculture, agro-economy, rural development; food and nutrition security, Sustainable Land Management (SLM); Irrigation agricultural value chain programming; institutional development and market linkages. The Firm shall have the following qualifications and experiences:

- Minimum of five years' experience in consultancy assignments for management, agricultural development, and building capacity of communities/farmers with specific knowledge and experience in irrigated crop agronomy; food and nutrition security; SLM; .;
- ii. The firm must demonstrate they have successfully implemented at least two similar assignments in Uganda or similar countries with tasks or components related to community/stakeholders engagement (mobilizing, sensitizing and training) of target beneficiaries and other relevant stakeholders especially for commercialized agriculture programmes
- iii. The firm must have core personnel with appropriate qualifications, skills/expertise with working experience in Uganda of not less than five years, well versed with Ugandan/society norms, cultural settings and the staff must demonstrate knowledge of the project specific local language.
- iv. Vast experience in agricultural extension, including Farmer Field School (FFS) methodologies
- v. Experience in rural agriculture development issues
- vi. Experience in sustainable soil fertility management especially in irrigation schemes
- vii. Experiencing using ICT in training and collecting data
- viii. Vast experience in managing large assignments

The Consultant's team shall include the following key personnel:

- a. Project Manager (Team leader).
- b. Agronomist
- c. Irrigation agronomist
- d. Expert in agricultural extension
- e. Expert in food and nutrition security
- f. Expert in sustainable land management
- g. Social development specialist.

5.2 Qualification and experience requirements of key staff

Expert area	Qualifications
Agriculture/ Team leader (full time)	 BSc in Agriculture, Horticulture, Agriculture Extension, Agriculture Economics, Agribusiness, Agriculture Land use and Management, Irrigation Engineering or any other closely related discipline. MSc. in Natural Sciences an added advantage. A relevant working experience of at least 7 years At least five (5) years' experience in consultancy assignments for management, agricultural development, and building capacity of communities/farmers.
Irrigation Agronomist (full time)	 BSc Degree in Agriculture, Horticulture, Land use and Management or any other closely related discipline. A relevant working experience of at least 7years and previous working and intimate knowledge of the irrigated agronomy in Uganda's agricultural sector is required. At least five (5) years' experience in consultancy assignments for building capacity of farmers in irrigated agronomy is required.
Agriculture Extension Specialist (full time)	 BSc Agriculture Extension or any other closely related discipline. A relevant working experience of at least 4 years and previous working and intimate knowledge of providing agriculture extension services FFS master trainer with at least two years of experience in training and technical backstopping FFS facilitators
Food Security and Nutrition Specialist (Part time)	 BSc. Agriculture, Food Science and Technology, Agriculture Extension, Agriculture Economics, Horticulture, Agribusiness, Agriculture Land use and Management. MSc. Food Security & Community Nutrition or Human Nutrition A relevant working experience of at least 3 years and previous working and intimate knowledge of the irrigated agronomy in Uganda's agricultural sector is required. At least five (5) years' experience in consultancy assignments for building capacity of farmers in irrigated agronomy is required.
Sustainable Land Management Specialist (Part time)	 M.Sc. in Soil Science/Land Management; Natural Resources Management, Land Use Management, Watershed Management, or Ecology. Professional experience/ skills of 5 years in Sustainable Land Management related adaptive research and dissemination /up scaling activities at watershed/community level

	Experience in working with Multi-disciplinary teams
Agronomist (full time)	 University Degree in Agriculture, Horticulture, Agriculture Extension, Agriculture Economics, Agribusiness, Agriculture Land use and Management, Irrigation Engineering or any other closely related discipline. Experience in providing Agricultural extension services and in particular Farmer field Schools (FFS) Experience in training farmers
Social Development Specialist (Part time)	 Bachelors' degree in Agriculture/Sociology/Social Sciences/Social Work and Social Administration Rural Development or Development Studies/with a Master's degree in Sociology or Social Development Experience in socio-economic analysis, including gender analysis, community mobilization, social development, local institutional development, and capacity building. Relevant working experience in gender and social risk management Experience in government or multilateral funding agencies. Demonstrated knowledge of extension systems Knowledge and experience in gender analysis within the agriculture sector

5.3 SUPPORT STAFF

The Consultant shall field any technical, non-technical and administrative staff to enable the timely delivery of the assignment and to the required standard.

6.0 SERVICES PROVIDED BY THE CLIENT

The Client shall introduce the Consultant to relevant stakeholders on request and also provide other relevant information and policy documents related to the assignment.

All expenses related to the assignment such as office space, travel (inland and foreign), and accommodation, stationary shall be borne by the Consultant.

7.0 DURATION OF THE ASSIGNMENT

The assignment shall have duration of 2 years, renewable for a period of 2-3 years upon successful completion of the first phase.

8.0 STAKEHOLDERS

The Consultant shall consider the following as the Key Stakeholders

- i. Ministry of Water and Environment
- ii. Ministry of Agriculture Animal Industry and Fisheries
- iii. Ministry of Trade Industry and Cooperatives
- iv. Ministry of Local Government
- v. Ministry of Finance Planning and Economic Development
- vi. National Environment Management Authority
- vii. Ministry of Gender Labour and Social Development
- viii. Local Governments where the Scheme is situated
- ix. National Forestry Authority
- x. Uganda National Farmers Federation
- xi. Ministry of Land, Housing and Urban Development
- xii. NGOs and other Non-State Actors operating in the project areas
- xiii. Financial Institutions operating in the project area