

THE REPUBLIC OF UGANDA MINISTRY OF WATER AND ENVIRONMENT

TERMS OF REFERENCE FOR THE DEVELOPMENT OF OFF-FARM INFRUSTRUCTURE MANAGEMENT MODEL AND ITS ESTABLISHMENT FOR KABUYANDA IRRIGATION SCHEME IN ISINGIRO DISTRICT

AUGUST, 2022

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ABBREVIATIONS

- DLG District Local Government
- FFSG Farmer Field School Group
- **GOU** Government of Uganda
- **ICT** Information and Communication Technologies
- **ISO** Irrigation Service Operator
- IWUA Irrigation Water User Association
- M&E Monitoring and Evaluation
- MAAIF Ministry of Agriculture, Animal Industry and Fisheries
- MTIC Ministry of Trade, Industry and Cooperatives
- MWE Ministry of Water and Environment
- **NIP** National Irrigation Policy
- **O &M** Operation and Maintenance
- WB World Bank
- **WFP** Water for Production
- **WUC** Water User Committees

1.0 Introduction

In 1997, the Government of Uganda (GoU) embarked on water sector reforms so as to ensure that services are provided and managed with increased performance and cost effectiveness and to decrease the government's burden while maintaining the government's commitment to equitable and sustainable provision of water services. The National Water Policy was established in 1999 followed by four sub-sector reform studies: i) Rural Water Supply and Sanitation (January 1999 - June 2000); ii) Urban Water Supply and Sanitation (September 1999 - December 2000); iii) Water for Production (WfP) (May 2002 - Jan 2004); and iv) Water Resources Management (July 2003 - August 2004).

The reform resulted in sub-sector Strategies and Investment Plans (SIP). The WfP sub-sector Strategy and Strategic Investment Plan (SIP) of 2009 aimed at supporting the MWE in developing an integrated policy framework for WfP and to improve efficiency and effectiveness of service delivery. This includes, amongst other key interventions, the rehabilitation and maintenance of existing WfP facilities, the establishment of functional management structures (e.g. Water User Committees, Water Associations, and Water Boards etc.), increased recovery of maintenance costs and increased private sector involvement.

The WfP SIP further aims at aligning the functions and mandate of MWE, MAAIF, local governments, local communities and the private sector, to improve the efficiency and effectiveness of service delivery. WfP is a shared responsibility between MWE, MAAIF and Ministry of Trade, Industry and Cooperatives (MTIC). MWE is responsible for development of off-farm facilities and MAAIF is responsible for on-farm facilities and activities in respect of irrigation, livestock and aquaculture while MTIC is responsible for facilities for wildlife and recreation in gazette areas.

The WfP has made great strides in providing water supply of reliable quantity and quality for multipurpose uses thereby increasing the overall crop, livestock, wildlife and fish production. To-date a total number of registered WfP facilities is 1,316, including 1,228 valley tanks, 35 earthen dams, 4 medium scale irrigation schemes and 49 small-scale irrigation systems in 121 districts. Of those, 28% are private facilities constructed with GoU-support. Under the National Irrigation Policy (NIP), Government is committed to a total 1,500,000 ha irrigated area by 2040, compared to the current 77,000 ha, which would require creating almost 70,000 ha of newly irrigated land per year. However, the WfP sector is still facing Institutional, Managerial, Operations and Management (O&M) challenges including: (a) inadequate resources, (b) absence of viable financing system, (c) inadequate management structures, (d) poor community participation, (e) inadequate technology, (f) inadequate technical capacity, (g) poor construction and supervision of construction, (h) lack of attention to environmental and health concerns, (i) low aquaculture yield due to poor practices, (j) withdrawal of the bulk of MAAIF staff without transferring responsibility to district local governments, users, or private entities, (k) illegal connection to water supply, (l) damage of river banks leading to floods, (m) limited interaction between management and water users, (n) limited participation of district officials in management decisions, (o) lack of land ownership by farmers, (p) lack of community contribution to the construction and management of facilities, (q) failure to maintain infrastructures of the schemes, (r) inadequate water extraction systems and livestock troughs,

(s) lack of participation in decision making by farmers, and (t) decline in volume of water leading to low efficiency.

To address some of these challenges, the Government of Uganda with financial assistance from the World Bank (WB) has embarked on the construction of Kabuyanda irrigation scheme in Isingiro District aimed at providing farmers in the project area with access to irrigation and other agricultural services, to establish Maintenance arrangements for irrigation service delivery..

Since 2008, WfP has made great strides in pursuit of its mission to develop and provide water supply of reliable quantity and quality for multipurpose uses, thereby increasing the overall crop, livestock, and wildlife and fish production especially in the semi-arid and drought prone zones. More specifically the following has been achieved;

- a. The National Irrigation Policy (2018) was developed and adopted. The development of the NIP (2018) was participatory in nature involving all stakeholders and clarifying roles of key actors in WfP sub sector.
- b. The WfP activities were decongested with the opening of five WfP Regional Centres i.e. in Mbarara for the Western region, Wakiso for the Central Region, Lira for the Northern and West Nile region, Mbale for Eastern region, Moroto for Karamoja. The opening of regional centres was to enable MWE respond quickly to the stakeholder's demands, needs, close implementation, monitoring and super vision of WfP activities, coordinated stakeholder engagement and their participation enhancement.
- c. MWE developed a hybrid irrigation management model with streamlined roles and responsibilities of each stakeholder including those of DLGs. The National Irrigation Policy guided the model development.
 - i. The Government of Uganda is committed to ensure provision of irrigation services through a demand driven approach. Must ensure that users are fully involved and contribute to O&M cost recovery of facilities and water services to promote ownership and sustainability. It is also to emphasize farmer empowerment so farmers take primary responsibility for irrigation infrastructure management for sustainability. The New Management Model has facilitated the formation of farmer based structures including FFSG, WUCs, and IWUA. This clarified the roles, communication and reporting of different structure.
 - ii. Enhanced mobilisation of farmers and use of private operators to off-farm infrastructure. Irrigation Water User Association (IWUA) will remain managers and the Irrigation Service Operator will be their employee.
- d. MWE developed the monitoring and evaluation framework for WfP projects and scoring cards under the GCCA project. This was intended to put in place a robust monitoring and evaluation (M&E) system for stakeholder monitoring project implementation and information sharing.
- e. Different abstraction systems were developed and installed at the WfP facilities including: Gravity flow systems to enable water transfer from higher levels to lower levels i.e. from mountains, rivers and dams especially for medium and large scale irrigation schemes; Windmill powered systems, Solar powered systems enabling water transfer from swamps, valley tanks, dams especially for water conveyance to small scale irrigation schemes; Diesel/ Petrol powered abstraction systems and Treadle pumping systems; all delivering water from dams, valley tanks etc. for crop and livestock watering at a distant locations.

- f. Continued capacity building through software consultants to strengthen management of WfP facilities especially those which were rehabilitated and newly constructed. A number of exchange visits between managers in different WfP facilities were undertaken. This was aimed at enabling peer learning and drawing good lessons and capacity building.
- g. Continued involvement of communities' right from project formulation, resettlement action plan implementation via direct involvement of MWE staff as resident engineers and sociologists at schemes and or hiring of consultants for the pre-project implementation, during construction and post construction management support. This is intended to build beneficiary capacities, capture their interests and understand. the gaps, projects to respond to the user's needs. Ownership of projects and use, undertake operation, maintenance and management of the facilities, provision of land.
- h. Development of WfP facilities with controlled access so as to improve generation of water user fees as well as operation and maintenance of schemes and facilities.
- i. MWE has also increased public private partnerships by partnering up with private farmers to construct WfP facilities with equipment at the subsidized prices and this has improved ownership and functionality of facilities.
- j. Water for Production Department developed a 10 year strategy (2020-2030) for Operation and Maintenance, Implementation plan for the sustainable management of water for production facilities (2020)

1.2 Justification for the Assignment

- a) Complexities of irrigation sub sector with its activities transcending a number of sectors; public, private and civil society has tended to create a difficulty in sharing roles and responsibilities. This has propelled uncertainty as to who plays what function in irrigation and this has affected national efforts in irrigation capacity building. Irrigation activities have also been implemented by different Ministries, Departments and Agencies (MDAs) and private sector with minimum or no coordination between the different key players in the sub sector resulting into conflicts and roles overlaps.
- b) The Government of Uganda is committed to implementing the National Irrigation Policy (2018) by ensuring provision of irrigation services through a demand driven approach. Also ensuring that users are fully involved and contribute to the O&M cost recovery of facilities and water services - to promote ownership and sustainability.
- c) Recent Government expenditure has largely been in rehabilitation coupled with development of new irrigation schemes with modern infrastructure and support programmes to improve the performance of irrigated agriculture. The continuing burden of rehabilitation and modernization is subsumed under operations and maintenance costs or met by special projects. Governments have therefore sought to transfer as much as possible of this recurrent cost to users. The motivation to transfer management responsibility as a means of reducing costs has come into sharp focus with the recent decline in international assistance for irrigation and donor pressure to reduce public expenditure deficits. It is argued that the costs of service provision should be borne by the beneficiary, but fee recovery has generally been poor, sometimes uneconomic to administer and rarely related to performance or quality of service.
- d) The problems of achieving genuine farmer participation and representation however, in the management of complex surface irrigation schemes are still considerable and are not necessarily addressed in the cooperative arrangement. Although the farmer

organization model has historically been more important than State managed, there is still a dearth of substantive experience and analysis of the characteristics of and 'nutsand-bolts' requirements for sustainable cooperatives, especially those developed within large, complex publicly developed irrigation schemes. The GOU prioritizes provision of support through a targeted subsidy for progressive and organized farmer groups. It has been established also that cooperatives are not legally anchored to undertake irrigation water management activities.

- e) In comparison to surface irrigation, Kabuyanda irrigation scheme presents a new dimension of piped water irrigation that requires a new thinking and approach towards establishing a more robust sustainability and management system with matching regulatory and legal frameworks.
- f) According to the O&M Strategy 2020, majority of all existing and operated WfP facilities in Uganda are still managed under a Private Public Partnership (PPP) management arrangement. This concerns around 1,000 valley tank facilities constructed under a PPP arrangement since 2008. Only 27% (328 facilities) of the total number of valley tank facilities in the country have been to the Community Based Management System (CBMS) management model as of 30 June 2019. All other WfP facilities including earth dams (35 facilities), SSIS (49 facilities) and MSIS (4 facilities) have attempted to implement the CBMS models. According to the strategy, only few facilities have actually been handed over to the users and the DLG into community-based management. Furthermore, as only a third of the facilities have a system for the collection of user fees in place and none of the facilities have an established O&M system/ plan, very little can be concluded as to the functionality of the management models in place.
- g) For off-farm, MWE assumes responsibility for planning, coordination and implementation related to the WfP facilities; however the sub-sector is too understaffed to perform WfP planning, development, standardization, supervision and quality control all over the country. The magnitude of work is too wide for the WfP department to provide adequate technical assistance at the Centre and Districts. More so, there is no systematic cooperation with and participation of the District Local Government -the roles that are foreseen for the DLG are systematically assumed, in particular with regard to the development of user structures. The DLG in turn lacks required resources to be more active.
- h) Based on the above perspectives, the project requires procuring the technical services to provide technical assistance to develop the Kabuyanda irrigation management model and its subsequent enrollment coupled with establishment of appropriate and functional management systems and structures.

2.0 Objective of the Assignment

The overall aim of this task is to define, develop and establish an off-farm infrastructure management model, its attendant systems and structures for effective and efficient irrigation management services and regulation in order to ensure sustainable Management, operation and maintenance, supervision, monitoring, reporting and control of irrigation of Kabuyanda irrigation scheme in Isingiro District.

The consultant shall define, develop and establish effective off farm infrastructure management model, related organisational structures and systems to ensure functional management, operation & maintenance of irrigation infrastructure, financial management and cost recovery, control and enforcement – sustainable irrigation water service delivery mechanism. Furthermore measures for supervision, monitoring and regulation of irrigation infrastructure, water resource use, rights, allocation and conflict management should be defined and instituted – irrigation water regulation mechanism.

Specific objectives:

The specific objectives of the assignment include:

- a) To define and develop the management model for Kabuyanda Irrigation scheme with clear roles and responsibilities of stakeholders to deliver irrigation service.
- b) To support the establishment of functional institutions/Structures and operationalize the model to deliver the irrigation service.
- c) To build the stakeholders' capacity to undertake their roles and responsibilities.

3.0 Scope of Services

3.1 Service Task I: Development of the Off Farm infrastructure management model

The assignment will provide technical assistance to define the appropriate off farm infrastructure management model, contractual arrangements and obligations, operational procedures and guidelines, roles and responsibilities for management of irrigation infrastructure and services. The Consultant is to design robust institutional arrangements within a defined legal regime to provide for effective and sustainable management of irrigation services and coordinated regulation of water resource use.

This key task shall entail the process of analysis, definition and development, consensus building on the model and its institutional management arrangements. It is also important that the proposed organization structures differentiate the functions, roles, responsibilities and interests of the various stakeholders/institutions for improved and sustainable irrigation services management and regulation, including water resources for the scheme.

3.1.2 Model development analysis

The purpose of the model analysis phase is to undertake stakeholder mapping-identify actors and movers in the scheme and their interests, analyse stakeholder capacity needs, analyse management models of existing irrigation schemes and suggest a suitable model for Kabuyanda irrigation scheme. The model studies and analysis phase include: Stakeholder Mapping, and farmers perspectives on the management of the scheme, Organizational Capacity Assessment of the existing organisations in the project area, capacity assessment of the DLG structures, -Sub County staff, and MWE needs), an analysis of the developed and customised Management Models of Agoro, Mubuku 1 and 2, Doho, Olwenyi, Tochi, Wadelai, Ngenge and Doho I & II, an analysis of Farmer Field Schools in the Context of Irrigation Schemes management to understand the dynamics of scheme management, the current irrigation scheme strength and weaknesses to be able to conceptualise a new dimension for the appropriate management system for a piped irrigation water supply for Kabuyanda Irrigation scheme. Regional and or international literature review on the similar irrigation management models for piped irrigated systems needs to be carried out to explore possible modelling avenues for this assignment.

The model analysis of the project area will also examine the opportunities, strength, gaps and challenges, the lessons learnt and good practices of the existing Farmer based organizations for the already completed medium scale schemes of Mubuku I and II in Kasese District, Doho I and II in Butaleja District, Ngenge in Kween District, Tochi in Oyam District and Wadelayi in Packwach District.

The Consultant shall identify and analyse drivers for collective action (social and economic), loyalty systems, group dynamics, leadership organisation and management of irrigation services. Assess level of clarity and stimulate agreement among farmers and key stakeholders on common goals, performance targets, outcomes, mandates, strategy, actions, roles, responsibilities and obligations for delivery of irrigation services and regulation.

The Consultant will undertake targeted interviews with key informants and relevant stakeholders at the community/farmer, local, regional and national levels to facilitate buy-in and smooth implementation of the proposed irrigation scheme management organisation and institutional arrangements.

The Consultant shall arrange interactive four dissemination and validation workshops/meetings for the model development reports at the national, district and farmer levels to reach the required consensus to discuss the model studies and analysis findings with recommendations on the possible management models recommended for the a deeper analysis for the scheme.

3.1.2 Irrigational model development

a) Scheme Organisational Structure:

The Consultant will undertake deeper analysis of the available models, contextualise and customise the model based on the project sustainability needs, complexity and services for Kabuyanda irrigation scheme by clearly defining the scheme's organisational structures, their mandates and responsibilities for the farmers, scheme organisation, private sector, district local government and central line ministries involvement. The consultant shall recommend the top organ that shall be responsible for the scheme management. Among others, this may include an authority; board etc. all will be based on the studies. A clear reporting hierarchy will be established to enable delegated services under the scheme to deliver effectively to scheme users/farmers and other stakeholders. The consultant will design management structures, positions and their horizontal and vertical inter-linkages.

b) Consultation and validation of the model with stakeholders

With a draft model, the Consultant shall hold about five (5) national and Local Government consultative meetings to discuss the proposed model. 2No.District Consultations shall also be held with participation of WfP Regional office, MAAIF Resident Team, District and sub-

county officials. These consultations shall be aimed at building consensus on the appropriate management model for the Kabuyanda Irrigation Scheme.

The consultant shall hold 38 No. Workshops at the scheme level. These meetings will also be used to build consensus, approve and adopt the off farm infrastructure management model by the farmers.

c) Costing of the model

After proposing the management model, the consultant will cost the model and come up with financial projections of implementing the model. These costs will be discussed with various stakeholders and agreed upon during the process of disseminating the model. This costing will enable stakeholders to appreciate what it takes to implement the model and appreciate the financial mobilization strategies and sources.

3.1.3 Develop Legal & Contractual obligations and implementation systems and procedure

a) Legal and regulatory mechanism

The consultant will be expected to investigate and determine the most appropriate, effective and binding contractual arrangements that will lead to sustainable off farm infrastructure management for the Kabuyanda irrigation scheme. The consultant will investigate, evaluate and determine the different legal and regulatory instruments in place in Uganda governing the legal arrangements and status for irrigation management. This will guide the formulation and establishment of contractual management structure for the irrigation schemes within prevailing enabling legal and regulatory framework and act as a mechanism to strengthen the mode of practice of irrigation as a business and proposals for longer term contractual recommendations. Several legal frameworks, laws and policies should be consulted to enable the Consultant to ascertain the legal foundations of the management model. Some of the legal frameworks consulted include;

- i. O&M strategy 2020
- ii. National Irrigation Policy, 2018
- iii. Water Act, Cap. 152
- iv. National Water policy, 1999
- v. Uganda Gender Policy, 2007
- vi. National Agricultural Extension Policy, 2016
- vii. Local Government Act, Cap. 243
- viii. Cooperative Societies Act, Cap. 112
- ix. National Agriculture Policy, 2013
- x. The Public-Private Partnerships Act, 2015

After understanding the existing national legal and regulatory frameworks, the consultant shall develop relevant performance management frameworks such as MOUs, constitutions and bylaws governing the operations of the scheme, among others and coordination of different stakeholders. The legal, regulatory and contractual arrangements shall detail the functions, duties and obligations of different parties at the scheme, the reporting hierarchy and regulatory responsibility. The Consultant will develop performance indicators for irrigation service delivery, regulation of irrigation services and regulation of water resource use. The Consultant will propose refined specific mandates for lead sector agencies (MWE and MAAIF) to enable them to play their role in supporting and assisting sustainable irrigation schemes infrastructure management. Define specific oversight roles for MWE & MAAIF, regulatory roles and functions for district local government authorities, management and maintenance functions for of any agency mandated to manage the scheme. The mandates for the different departments and contractual relationships have been defined, for which draft contract terms and conditions have been provided.

The regulatory mechanism should define bye-laws, enforcement of rules and regulations, supervision and monitoring by district local government and central ministries, water resource regulatory mechanism – rights, access, use, allocation, protection and conflict management measures.

The consultant will organise a number of meetings with farmers, and other stakeholders to share, discuss, build consensus, approve and adopt the legal and regulatory mechanisms for management, operation and maintenance of the off farm infrastructure. The central consultative workshops will be organised at the national, district and farmer levels to discuss various legal instruments.

3.2 Service Task 2: Support the Establishment and Operationalisation and of the Off Farm infrastructure management structures

32.1 Establishment of the management structures

The consultant shall engage, mobilise the stakeholders and more vigorously the farmers in a participatory, democratic manner ensuring collective action, ensuring effective decision making to establish the approved scheme institutions as per approved management model. The institutions will legally register and operationalise the institutions to the level that they are couched and facilitated to function and sustain themselves. Technical officers will be specified under this assignment for those who will be required to be resident at the scheme to allow realisation of the desired functionality.

The establishment of these institutions should be gender sensitive to an extent of ensuring that women participation is not less than 45% in the leadership positions of the scheme institutions.

3.2.2 Development of systems and procedures

Once the model has been approved and adopted, the consultant will embark on development of the systems and procedures, manuals and guidelines for management/administration, operation and maintenance of the off -farm infrastructure of;

- i. Human resources management and development manual (20 copies)
- ii. Recruitment and performance appraisal systems and formats (20 copies) Supervision and quality control manuals (50 copies)
- iii. Financial Management Manual (50 copies)
- iv. Audit manual (20)
- v. Procurement & disposal manual (30 copies)
- vi. Operation and Maintenance manual (100 copies)
- vii. User fees payment/collection system & guidelines (50 copies)

These developed strategies, manuals and guidelines will need to be discussed with farmers, DLG, Sub County and national level stakeholders so as to build consensus, approve and adopt them. The consultant will organize at least 05 (Five) workshops for this purpose. After the above instruments have been adopted, the consultant shall print them and build capacities of the stakeholders during the capacity development phase.

3.2.3 Development of ICT Tools to Monitor Irrigation Services

The consultant shall create ICT tools , install it, test it , train irrigation management structure leaders how to use it to track functionality of the operational services such as payment of water user fees, detection of any water linkage in the irrigation network, identification and monitoring of any new grievances and information dissemination to key stakeholders on all operation and maintenance activities of the irrigation scheme.

3.2.4 Procurement of the Irrigation Scheme Operator

Once the model has been approved at different levels and by different stakeholders, procurement and recruitment of Irrigation Scheme Operator to be responsible for the security, operation and maintenance of the scheme infrastructure shall be formally procured by MWE. The role of the consultant shall be to design contract specification/bidding document, defining the service provider activities, outputs', performance indicators and other relevant contractual obligations including developing the irrigation service agreement. The irrigation service agreement drawn by the consultant will be subjected for discussion and approval by the World Bank, MWE, MAAIF, and Scheme management body. The parties in this agreement will be spelt out specifying their roles and responsibilities.

3.3 Service Task 3: Capacity Development for Off-farm Institutional Development

Capacity Development is critical since it imparts skills and equips the farmers, scheme institutions leadership core technical staff and other key stakeholders to enable the actors and to perform the stipulated functions for sustainable irrigation management

a) Organizational and Institutional Capacity Development and Training

In developing the steps and process for capacity development the Consultant will focus on organizational and leadership strengthening: on the following most critical areas among others:

- i) Stimulate farmers collective social action based on common/agreed goals, interests, incentives, shared values, personal commitment and positive attitudinal changes;
- ii) Engender participatory problem diagnosis/analysis, own solution finding/adoption, innovation, interactive learning and information gathering/exchange, adopting indigenous knowledge and sharing experiences;
- iii) Establish group cohesion, negotiation, teamwork, conflict resolution and consensus building;
- iv) Adopt confidence/trust based decision-making and ownership of farmer based organizations and institutional systems
- v) Determine drivers for change; internal, external, local organisation, higher level institutions. Identify potential champions of change.
- vi) Define methods, procedures and tools
- vii)Carry out induction and orientation of key staff
- viii) Undertake human resource management, performance and skills enhancement and mentorship & training
- ix) Put in place Capacity Development strategy (50 Pcs) -20 copies in English and 30 translated in the local language)

- x) Undertake financial & audit training, couching and mentorship
- xi) Enhance capacity of the operator on scheme operation and maintenance, enhance capacity of the scheme institutions in monitoring the operator's activities in areas of operation and maintenance
- xii)Undertake training of scheme institutions in procurement and disposal areas
- xiii) Undertake training in Monitoring and evaluation
- xiv) Farmers/scheme institutions capacity enhancement in understanding legal issues as contained in the legal/regulatory frameworks
- xv) Videos: On the implementation process, good practices and success stories or positive impacts (five copies)

The below expound on the needs of the critical manuals/training materials

b) Operation and Maintenance of Irrigation Infrastructure and Facilities:

The Consultant will provide support to staff and farmers in monitoring operation and maintenance of irrigation infrastructure and facilities. The Consultant will make recommendations for the organization, operationalization, and management of the infrastructure facilities. The operation and maintenance guidelines is closely linked to the water uses, the users and organizing a unit/ or management structures to operate, maintain and manage the irrigation schemes. The consultant will prepare manuals and training materials and undertake the training in operation and maintenance.

c) Administrative and Management Training:

Training and capacity development support will also focus on administration and management to improve governance and streamline irrigation scheme level operations. This is aimed at establishing clear and appropriate organizational management systems and procedures. This will lead to higher managerial effectiveness, clear linkages, adequate accountability and reporting both internal and external.

There will be limited conflict of roles between hired technical staff, private organisations staff, farmer organisations, technical committees and leaders. Regular performance appraisals for technical staff will be introduced through participatory development of performance indicators that are consistent with targets.

Emphasis will be made on the requirement to hire and retain technical human resource that meets the competence levels necessary to comply with performance expectations defined. In order to support implementation of conventional human resource planning and management, a human resource manual will be developed as part of the capacity development support. Participatory approaches to designing of management manuals will help transfer implementation and interpretation skills to the societies and their membership in addition to generating buy-in for the changes to take place. This will contribute to attraction of more adequate skills, improved management capacity and better facilitation of scheme staff resulting into high motivation and performance.

d) **Regulatory Framework:**

Training under this area will be undertaken at district local government level, private organisations and farmer leadership level with selected responsible officers of central government ministries. The content will be designed to introduce service level contracting, specifically focusing on irrigation infrastructure management and maintenance contractual arrangements.

This will enable representatives of the key organizations and institutions to clearly understand and appreciate arrangements for management of hydraulic works and irrigation infrastructure and land as defined in the contractual protocols, including the mandates, roles and responsibilities. It will also cover the functions and obligations of farmer organisations, private organisations and the respective technical sub committees in order to guide the realignment of the institutional structures, which will subsequently be included in the bye-laws. This area of convergence institutional governance will need to be comprehensively addressed through training and handholding up to the first generation of reporting through practical guidance and report preparation.

e) Performance Evaluation and Functional Support

The Consultant will build capacity under this area as follows:

- i) Assist the implementing agency to start-up performance management system and evaluating the operationalization of the management model.
- ii) Establish effective determination of organisational and institutional development and performance indicators, including service delivery indicators.
- iii) Put in place control mechanism to deal with implementation challenges

The consultant is expected to undertake monitoring and evaluation through documentation of the process of implementation of the model and making necessary adjustment as required. Therefore the Consultant shall develop a monitoring and evaluation mechanism for the implementation process based on indicators developed during the model development stage. The consultant shall draw lessons and document experiences and suggest improvements for effective management, operation and maintenance of Kabuyanda irrigation scheme.

The Consultant shall set-up systems for assessing the performance of leaders, technical staff and farmers in the execution of their functions, duties, roles and responsibilities and effectiveness of attainment of targets set. An assessment of the level of management of resources of the organization shall be done.

The Consultant shall test, correct and modify the reporting of performance and identify areas for improvement and the consultant shall give technical support.

f) Financial Management and Business Planning:

The Consultant shall respond to the needs for this purpose and also proposes sources of revenue and internal controls. Training will highlight advantages of retaining competent manpower with respect to specific tasks and linkages to financial management and accountability, with the broad objective of improving governance i.e. separation of financial management from leadership and the farmers. The Consultant shall develop Financial Management and Business Planning guidelines/manuals for the scheme organisations (50 copies)

The Consultant will train the farmers and the scheme management leadership on orientation and participation in higher level commercialization of irrigated agriculture produce/commodities. The capacity enhancement is intended to ensure financial sustainability of the irrigation schemes, inculcating cost recovery practices, tariff setting and review mechanisms leading to levying of appropriate tariffs/user fees; in addition to instituting investment financing for major repairs and infrastructure renewal. The consultant shall train the staff, the leaders, farmers and key stakeholders in budgeting approaches (income/revenue and expenditure), business planning, costs recovery, tariff setting and progressive adjustment based on size of land holding per farming plot. The training phase will thus focus on justifying the proposals and generating buy-in.

g) Follow Up Farmers' Support:

After conducting the capacity development activities, the consultant is expected to identify gaps regarding technical and managerial issues and thereafter offer back up support to fill the gaps to ensure leaving behind a functional irrigation scheme management system. A functional management system means that what the management model proposes in terms of scheme institutions, operation and maintenance requirements, stakeholders' roles, are being effectively and efficiently implemented/ practised and the scheme can run sustainably with minimum support from the external source.

4.0 Duration of the assignment

The assignment shall have duration of 24 months

5.0 Organisation of the Assignment

The assignment will be organised in terms of time, deliverables and reporting as follows;

5.1 Assignment Reporting and Coordination

The assignment will be coordinated and reported in the following manner;

The Ministry of Water and Environment through its Water for Production Department will coordinate and manage the assignment implementation will be represented by Project Coordinator..

All reports will be submitted to:

Permanent Secretary Ministry of Water and Environment P. O. Box 20026 Kampala

Attention: *Component Coordinator – Irrigation Services Irrigation for Climate Resilience Project.*

The consultant shall hand over all data collected during the course of the assignment to the client in formats approved by the client including shape files. Reports shall be delivered to the client's address as stated above with a copy to the World Bank Task Team Leader for ICRP.

5.2 Assignment Deliverables and time

The assignment will be implemented and reported according to the set deliverables and implementation reports should bear implementation proof like photographs, attendance lists and or signed implementation forms signed by the respective Sub Counties.

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

		TIMING		
ITEM	REPORT/DOCU MENT TITLE	AFTER COMMENC- EMENT	CONTENT	NO. OF COPIES
A.1	Inception Report	Month 1	 a) The report shall outline the Consultant's mobilization, the work plan, strategy, methodology, plan and timetable for the services, Conduct field visits, incorporate field visit findings on gaps, opportunities and challenges plus recommendations in the inception report and comment on the TORs. b) The quality assurance plan shall include the following (i) A quality policy statement setting out the objectives of the plan and (ii) The personnel who will implement the plan, their responsibilities, deployments and authority. 	4 hard copies and an electronic copy on a memory stick o
A.2	Model development studies and analysis Report	Month 3	Consisting of the comprehensive account of the key activities and model studies & research findings, field findings, model analysis and recommended model for Kabuyanda. among others	6 hard copies and an electronic copy on a memory stick.
A.3	Irrigational model development Report	Month 6	Consisting of the comprehensive processes, stakeholder engagement discussions, recommendations, scheme organisation structures & onogram, roles and responsibilities of institutions/organisations, vertical and horizontal linkages, legal /regulatory / contractual obligations and implementations systems, frameworks, model costing, ensuring the full account of the key activities and outputs as per TORs.	6 hard copies and an electronic copy on a memory stick

A.4	Scheme Institutions Establishment Report	Month 12	Consisting of the comprehensive account of the key activities and outputs done including among others scheme institutions establishment and operationalisation of the off-farm infrastructure management structures, manuals development, systems and procedures development, development of ICT tools to monitor irrigation services, procurement of the Irrigation Scheme Operator, development of Irrigation system operator's recruitment documents among others.	6 hard copies and an electronic copy on a memory stick
A.5	Capacity Development Report	Month 18	Consisting of the comprehensive account of the key activities and outputs done during capacity development phase including among others the stakeholder skill enlacement in scheme management and leadership, financial management, procurement, operation and management, monitoring and evaluation, regulation etc. as enshrined in the Capacity development deliverable, Organizational and Institutional Capacity Development and Training, Operation and Maintenance of Irrigation Infrastructure and Facilities, Administrative and Management Training, Regulatory Framework, Performance Evaluation and Functional Support, Business Planning and Follow Up Farmers' Support	6 hard copies and an electronic copy on a memory stick
A.6	Final and Farmers follow up support Report	Month 24	Consisting of the comprehensive account of the key activities, Out puts, findings recommendations from the commencement for each well specified deliverable by deliverable following all approved work plans. The final should include gaps identified and support offered to the farmers and scheme management. The proof of the efficient and functional system should be included. Photos arranged in each deliverables with captions to describe the activity on each photo. Lessons learnt and recommendations for further improvement can be included.	6 hard copies and an electronic copy on a memory stick

The Client shall review and provide comments on the reports within two weeks of submission and approval of the deliverable reports and work plans shall be approved by the client after the consultant has responded to the comments within two weeks of the reviewed report. The reviewed should be accompanied by the matrix showing the comments and consultant's response indicating the pages and paragraphs for the reviews. The Consultant shall also prepare monthly reports after the inception stage to keep the MWE informed of the progress made, the challenges if any met and proposed solutions as well as risks and mitigation measures.

6.0 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 community and stakeholders' mobilization, sensitization, project awareness, training presentation of key reports after each project milestone to a representative group of stakeholders that is to be agreed with the client and as described in the TORs. The Consultant is required to include a provisional sum of 100,000 USD to meet costs of holding the workshops/meetings.

The basis for the payment of reimbursements for workshops/meetings shall only be output based i.e Number of workshops/meetings held and the implementation proof shall be required as clarified below:

Community meetings/Workshops: There shall be activity implementation proof specifically of signed attendance forms with telephone contacts where possible, video recordings, photos and implementation forms endorsed by the Sub County and Local Council I leadership as proof for undertaking community meetings/workshops.

Sub County meetings/workshops: The activity implementation forms specifically of signed attendance forms with telephone contacts where possible, video recordings, photos. The implementation forms shall be endorsed by the Sub County leadership in addition to the attachment of the photos and signed attendance forms.

District meetings /workshops: The activity implementation forms specifically of signed attendance forms with telephone contacts where possible, video recordings, photos. The implementation forms shall be endorsed by the Chief Administrative Officer as proof of activity implementation shall be required.

National/regional workshops/ meetings: The activity implementation forms specifically of signed attendance forms with telephone contacts where possible, video recordings, photos. The implementation forms shall be endorsed by the Ministry of Water and Environment.

In addition to the proof of holding the meetings/workshops, the consultant shall also provide workshop/meeting reports for each specific meeting.

These workshops will be organized and technically facilitated by the consultant based on the agreed work plan and methodology during the technical proposal and as reviewed during inception phase with the client and from time to time based on the reviews.

The consultant shall pre-finance and will be re-imbursed.

The Consultant will be required to quote for the professional fees/man months and other attendant fees for community mobilisation, sensitisation, technical facilitation/ workshop presentations, field allowances, transport /training/ manual developments and processing, printing model developments, studies, report writing, quality assurance, and other attendant firm costs like field offices, and development and dissemination of information, education and communication materials, facilitating all TVs (four (4) in number), Radio (6 (six) in number) and other communication channels for stakeholder mobilisation and sensitisation; vehicles, Fuel, equipment and tools etc., as required to accomplish the assignment will be quoted by the consultant. All the above only relate to the company/firm and staff costs while the allowances and fuel for the client, district and central Government staff will be handled by the client.

7.0 Consultancy Technical and Team qualification requirements7.1 Organisation experience and Technical requirements

A competent Consultancy firm with the following professional qualifications is required:

- a. Minimum of five years' experience in Africa in participatory water management, rural community management, mobilization, irrigation scheme model development and establishment, capacity enhancement and training for irrigated agriculture projects-farmers engagement accompanied by demonstrable approaches and methodology.
- b. With the help of brochures and other Information, communication and education materials demonstrate the vast experience in designing manuals, policies, strategies, model developments, community engagements, studies and systems for irrigated agriculture and water for production facilities.
- c. Experience of assignments of similar scope and nature and value in the last five (5) years with particular previous experience of at least two assignments in Uganda.
- d. Presence of appropriate skills among staff in the areas of: (i) irrigation structure/ organisational Development, (iii) community mobilization & Social development, (iv) Irrigation management .The following key staff must demonstrate knowledge of the Project specific Local Language-Runyankore, custom norms and values; Social Development Specialist and Assistant Social Workers.
- e. The firm must be legally registered and established in Uganda.

7.2 Consultant's team qualification requirements

The Consultant will demonstrate availability a team of well qualified personnel/experts to undertake field activities. The Consultant shall present the staffing schedule in a manner that makes it clear as to which personnel will be involved in a specific activity. The Consultant's team shall include the following key personnel:

	Key staff	Number of consultants	No. of Staff Months
1	Team Leader/Project Manager	1	24
2	Irrigation management Specialist	1	12
2	Social Development Specialists	2	24 (each)
3	Irrigation organisation Specialist	1	24
4	Legal Expert	1	12
5	Assistant Community Development Officers	3	24 (each)
	Total staff months		168

Table 1: Key staff and	l expected man months
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Position	Specific responsibilities	Qualification and Experience
Team Leader/	a) To direct and coordinate the	Lead consultant of good repute and
Project	implementation of the consultancy	a University Bachelors and Master's
Manager	assignment	Degree in Sociology, Social Work
	b) Responsible for quality control and	and Social Administration,
	quality assurance of the consultancy	Development and
	outputs.	Population/community Studies. A
	c) Head the team of experts executing the	relevant working experience of
	assignment	seven (7) years in project
	d) To be a focal point person for all the	management, community
	administrative engagements with the	development, irrigation model
	client.	developments, scheme
	e) To participate in all activities and fill	management, research and previous
	gaps where necessary.f) To ensure that all the contractual	working and intimate knowledge of
		the Ugandan water and agricultural sectors is required.
	obligations and requirements are adhered to.	sectors is required.
Social	a) Responsible for the project social	Bachelor's degree and Post
Development	related trainings and meetings,	Graduate master qualification in
Specialist	b) Responsible for project awareness	Sociology, Social Work and Social
•	activities, mobilisation, sensitisation,	Administration, Development
	research and studies.	Studies or population studies with
	c) organise field visits for the assignment	suitable experience of seven (7)
	d) Ensure that social issues and social	years in community development,
	management activities are	capacity development community
	mainstreamed into the design of the	mobilization, and most importantly
	management model	farmers' mobilisation for irrigation
	e) Ensure that participatory monitoring is	schemes. The candidate should be
	carried out and that the lessons learnt	conversant with the Participatory
	are reflected in activities	Rural Appraisal procedures and
	f) Prepare 'case studies' based on the	methods. The understanding and
	reviews of monitoring reports and sample survey of the selected activities	
	and document procedures adopted,	intervention areas is a must.
	problems faced and good practices in	intervention dreas is a mast.
	planning and implementing the	
	infrastructure systems.	
	g) assistance to community organizations	
	in establishing, maintaining their M&E	
	system, and evaluating and adjusting	
	their strategies;	
	h) Responsible for development of IEC	
	materials and their dissemination	
	i) In consultation with other team	
	members, develop training tools and	
	I.E.C materials.	

Position	Specific responsibilities	Qualification and Experience
	 Recommend how legal issues should be mainstreamed into the design and plan of O&M at the scheme level. Advise on legal and regulatory issues to be included in the participatory monitoring during its design The consultant will review legal and policy documents, and other material Participate and deliver bylaws and performance Contracts and or any other required legal documents including registering such documents. 	
Irrigation organisation Specialist	 a) Review existing polices and legislative framework in the water and agricultural sector; to identify linkages, opportunities and existing gaps. This will take into consideration the existing mandates of various stakeholders, legislation and policy framework. b) Responsible for irrigation management model studies, water management experiences more inside and outside Uganda and examine their relevance and scope for replication/customisation in Isingiro Irrigation scheme bearing mind of its scope and irrigation infrastructure operation and maintenance requirements. c) Put in place working mechanisms both horizontal and vertical linkages 1 for scheme institutions and stakeholders d) Targeted interviews with key informants and relevant stakeholders at the community, local and central government levels to facilitate buy-in for the farmers to participate in irrigation schemes management improvements. 	 A Bachelor's degree in Human Resource or Management related studies is required. A Master degree course in Public Institutional development/Management/ Human resource is required Experience in mobilising, training, institutional development, irrigation model development and establishment of irrigation structures for schemes of schemes. A seven (7) years' experience in the above fields is required.

Position	Specific responsibilities	Qualification and Experience
	e) Review current management practices/structures, identify existing opportunities, potentials and experiences. Make proposals to adapt, transform, integrate and modify practices for improvement in management of scheme. Define appropriate management approach and the management model	
	 f) Identify key business weaknesses, opportunities and constraints - policy, regulatory and bureaucratic processes to be addressed. 	
	g) Specify the design for scheme level management systems, including specific processes for and obligations in terms of authority and roles and responsibilities for different parties including farmers, farmers groups, private actors, local governments and linkages to other relevant bodies.	
	h) Determine sustainable model/approach to operate and maintain the scheme, establish structures and develop modern systems ICT systems for the enhanced small-holder farmer empowerment communication.	
	i) Propose specific mandates for lead sector agencies (water and agriculture) to enable them to play their role in supporting and assisting sustainable irrigation schemes infrastructure management at lowest community level.	
	j) Together with other expert ensure all training tools under this assignment are developed	
	k) Participate in the draft of MOUs, agreements and contracts	
Community Development officers	a) Assist to mobilise and train the stakeholders/communities	Bachelor's degree in Social Sciences with suitable experience in community development and

Position	Specific responsibilities	Qualification and Experience
	b) Assist in awareness activities,	community mobilization with
	sensitisation and situational analysis	experience of three years. The
	activities.	cultural and Language
	c) Assist to undertake field visits to	understanding of the intervention
	assess, how social issues are addressed.	areas is critical requirement since all
	d) Assist in handling social issues and	the work is community centred.
	social management activities.	
	e) Assist to ensure that participatory	
	monitoring is carried out and that the	
	lessons learnt are reflected in activities	
	f) Assist in preparation of 'case studies'	
	based on the reviews of monitoring	
	reports and sample survey of the	
	selected activities and document	
	procedures adopted, problems faced	
	and good practices in planning and	
	implementing participatory water	
	management systems.	
	g) Assist establish, maintain M&E	
	system, and evaluating and adjusting	
	their strategies;	
	h) Assist in development of IEC materials	
	and their dissemination	
	i) Assist to handle grievances during and	
	after project implementation phases	
	j) Assist in project social related trainings	
	and meetings in relation to conflict resolution,	
	k) Responsible for grievance mechanism	
	awareness to key stakeholders	
	1) Undertake field visits to assess, how	
	social issues are addressed.	
	m) Assist in development of grievance	
	redress mechanism	
Irrigation	a) Conduct a detailed analysis of the	Irrigation Water Management
management	Operation, Maintenance for the	
Specialist	irrigation scheme,	degree and MSc in Civil
-	b) Participate in Irrigation Water	Engineering/ Agricultural
	Management studies monitoring,	Engineering and have suitable
	administration, and all other	experience in designing and
	activities associated with operation	implementing effective procedures
	of the scheme.	and arrangements of irrigation water
	c) Develop recommendations for	management, operation and
	improved management control	maintenance procedures/guidelines
	systems, technologies, operating	for the irrigation schemes. Hands-on
	procedures and other factors for	experience in supporting the
	improved water management;	development of Farmer
		management institutions is strongly

Position	Specific responsibilities Qualif	fication and Experience
		red and with experience of not
	scheme training program for less that	an seven years.
	system management, O&M and	
	development;	
	e) Support the project field irrigation	
	systems and ensure development	
	technical strengthening plan for	
	Irrigation Water Management.	
	f) Develop the Operation and	
	maintenance manual and	
	disseminate it with input from the	
	various team members and also the	
	detailed design parameters/notes,	
	drawings and carry out advocacy	
	for the farmers and other	
	stakeholders on project designs	
	relating to its sustainability.	
	g) Prepare relevant training curricula	
	and programs for the MWE,	
	MAAIF, DGL staff, and other	
	supporting agencies and impart	
	training of trainers and trainees on	
	O&M, supervision of construction,	
	of Irrigation Water Management	
	Support the establishment and	
	operation of effective Irrigation	
	Water Management support	
	systems under the Project at project	
	levels and impart training to the	
	trainers and staff.	
	h) Analyse the options available for	
	enhancing irrigation water	
	management and governance, maintenance of irrigation	
	e	
	structures and equipment, water use and scheduling	
	i) Responsible as a resident staff to	
	ensure realisation of capacity	
	building in field channel	
	establishment and water	
	scheduling, establishing of	
	required water scheduling	
	guidelines	
	j) Participate in capacity	
	development	
	F	

Position	Specific responsibilities	Qualification and Experience
Support Staff	The Consultant shall field any non-technical and administrative support staff that may be felt necessary for the delivery of the assignment.	

8.0 Key Stakeholders

The Consultant shall consider the following as the Key Stakeholders

- 1. MWE
- 2. MAAIF
- 3. MTIC
- 4. Ministry of Lands, Housing, and Urban Development
- 5. Ministry of Gender Labour and Social Development
- 6. Isingiro District Local Government
- 7. Sub County / Town Council level
 - Kabuyanda Sub County,
 - Kabuyanda Town Council
 - Kikagate Sub County
- 8. Parishes
- 9. Farming Households in 38 Villages
- 10. Individual Farmers
- 11. Land owners
- 12. CSOs/NGOs working in Isingiro District
- 13. Contractors and other project implementers

9.0 Data and Services from the Client

The Client will:-

- i) Assist the Consultant to make contacts with any relevant Government Institutions from whom information to enable execution of the assignment may be required.
 - ii) Provide the available documents the client as listed below;
- 1. Water for Production Capacity Building Strategy
- 2. Water for production management strategy
- 3. Irrigation Policy 2018
- 4. Operation and maintenance Strategy and plan for sustainable management of Water for Production facilities 2020
- 5. Water Policy 1995.
- 6. MWE Gender mainstreaming strategy
- 7. National Gender strategy
- 8. Resettlement Action Plan
- 9. Project Sectional Raps
- 10. Irrigation Service Agreement for FIEFOC II schemes
- 11. General MOU for FIEFOC II schemes
- 12. Project feasibility reports
- 13. Environment, Social Management Framework
- 14. Resettlement Policy Framework
- 15. Project Environment and Social Impact Assessment Report