



MINISTRY OF WATER, SANITATION AND IRRIGATION
STATE DEPARTMENT FOR IRRIGATION
KENYA WATER SECURITY AND CLIMATE RESILIENCE
PROJECT
TERMS OF REFERENCE
FOR

CONSULTANCY SERVICES FOR IRRIGATION SECTOR
FINANCING AND INVESTMENT

1. Introduction

The State Department for Irrigation was established vide Executive Order No.1 of 2023 under the Ministry of Water, Sanitation and Irrigation and bestowed with the following functions: National Irrigation Policy and Management; Water Harvesting and Storage for Irrigation; Management of Irrigation Schemes; Water Storage and Flood Control Management; Mapping, Designating and Developing Areas ideal for Irrigation Schemes; Development of irrigation infrastructure; and Land Reclamation. These functions generally bestow the State Department with the overall responsibility of development and management of irrigation and drainage in the country.

In execution of this mandate, the State Department is guided by strategic goals which include: improved water harvesting and storage capacity for irrigation; Optimal and sustainable exploitation and development of irrigation potential; improved productivity of irrigation schemes; and land degradation neutrality achieved. Public investment towards irrigation infrastructure development has averaged at KES. 5 billion over the period between 2010 and 2015, and has increased gradually to the current investment level of KES.23 billion in the 2023-2024 financial year. This level of investment is low given the target of the National Irrigation Policy 2017 of 40,000 ha (100,000 acres) per year. To attain the envisaged annual target of new irrigation area, the sector will require an estimated investment of KES. 65 billion annually including the cost of developing water resources for irrigation.

The plans elucidated in the MTP IV are drawn from the NISS that requires Kshs 389billion for implementation. Noting the current fiscal environment, the State Department as it is across government has to become innovative in resource mobilization to drive this critical agenda of the government. These innovative approaches include, Public Private Partnerships (PPPs), blended finance, climate finance, catalyzing private capital, irrigation service tariffs, cost recovery and co-financing among others. This therefore calls for competencies in project finance structuring to build the best mix of these financing and funding models. It will involve research, lobbying, negotiations, outreach to bring together development partners, international finance institutions, local financial institutions, local irrigation service providers, private investors among others. It is for this reason that the SDI is formulating the National Irrigation Sector Investment Plan (NISIP).

The State Department of Irrigation has therefore embarked on developing a National Irrigation Sector Investment Plan to act as a resource mobilization tool with the main goal of establishing a robust, coordinated and sustainable financing and investment framework for promotion of socio-economic development in the country. The Plan will thus look into the current legal and institutional arrangements within the sector, propose the necessary business lines to focus on with their respective institutional and coordination arrangements and finally prescribe the Monitoring, Evaluation and reporting framework to ensure successful implementation of the Plan. The SDI is thus desirous to procure consultancy services of an Expert to carry out the irrigation sector financing and investment assessment necessary to enhance mobilization of resources for the realization of the SDI goals and objectives.

2. Objectives of the consultancy

The main objective of the consultancy is to determine the sector financing status, gaps and needs, identify appropriate financing models suitable for the Irrigation sector and offer knowledge transfer and capacity building to the technical committee. The consultancy will also entail the following:-

1. To provide irrigation financial and investment modeling expertise as required including assessing the current financing levels and portfolio in the sector
2. Draft the assigned NISIP chapters in consultations with relevant stakeholders
3. To provide practical implementable recommendations and the necessary regulatory and policy framework adjustment on irrigation financing provision
4. Offer knowledge transfer and capacity building to the technical committee and the SDI at large

3. Scope

The SDI wishes to engage an individual consultant hereinafter referred to as the Consultant for consultancy services that will guide the irrigation sector financing and investment assessment. The Consultant will be required to ensure that the State Department, hereinafter referred to as the

Client, meets its objective stated above by carrying out activities guided by the following Terms of Reference:

Task 1 – Analyze the current investments and financing landscape in the irrigation sector (Where is the sector currently? –Situational analysis)

- (i) Conduct desk research and interviews with key stakeholders to map out existing investments models, funding sources, and financing mechanisms in the irrigation sector
- (ii) Develop an inventory of current public and private investments in irrigation projects, including national and county governments, development agencies, NGOs, impact investors, commercial banks, etc. Document the scale, focus areas and instruments approaches used by each.
- (iii) Develop an inventory of possible private sector investors including commercial banks, saccos, impact investors, pension funds, irrigation equipment suppliers, etc that may have interest in putting capital in the irrigation sector.
- (iv) Analyze trends in public spending on irrigation over the past 20 years by government ministries and departments. Identify key constraints in public financing.
- (v) Review private financing in irrigation to date. Assess the risk profiles-and returns in private irrigation investment, key challenges faced, key enablers and lessons learned.
- (vi) Assess locally and regionally what has worked before and determine what needs to be done to attract more private finance.
- (vii) Identify key gaps and opportunities in irrigation financing through a structured market assessment. Map demand for financing against availability, and surface major barriers.
- (viii) Develop 3 case studies of innovative irrigation financing projects that have successfully brought in private capital. Highlight key success factors and lessons learned .
- (ix) Synthesize findings into a landscape analysis of irrigation investment and financing. Outline main channels, constraints, gaps, and high potential opportunities.

Task 2 – Model/build scenarios of potential growth opportunities for the irrigation sector showing public and private financing requirements to meet the envisioned future. (Where does the sector want to go?)

- (i) Conduct market sizing and growth forecasting for the irrigation sector under different scenarios (. baseline, optimistic, pessimistic). Estimate future market size, revenues and investment needs.
- (ii) Develop an economic model to estimate irrigation infrastructure, equipment, operation and maintenance costs under projected growth scenarios.
- (iii) Project public and private financing needs based on current government budget allocations and private investment ; and irrigation service fees (current and projected). Estimate funding gaps.
- (iv) Assess potential for commercial financing, PPPs, blended finance modelsand capital market financing to fill financing gaps, based on investor interest and risk levels. .
- (v) Model multiple financing mix scenarios to support sector growth plans. Vary public-private split as well as typology by size and ownership in a programmatic approach

- (vi) Estimate investment returns for private capital under different scenarios. Identify high potential commercial opportunities.
- (vii) Develop 3 illustrative investment cases showcasing sustainable financing models for sample irrigation projects; and Transfer knowledge on developing sustainable model SDI team involved in project structuring and resource mobilization.
- (viii) Develop, synthesize and analyze into a set of projected growth scenarios, associated financing requirements, and recommendations on optimal financing mix.

Task 3 - Propose what it will take to create an irrigation sector that can attract all forms of financing (What will it take to get there?)

- (i) Assess the current legal, regulatory and policy frameworks in the irrigation sector with the aim of identifying constraints to future growth, private investment and areas for reform to unlock sector growth.
- (ii) Evaluate capacity of existing irrigation institutions to administer a services delivery approach to irrigation services as well as to administer increased private finance and PPP projects for irrigation services. Recommend institutional reforms and strengthening needs necessary to improve financial credibility and governance.
- (iii) Develop risk mitigation proposals including credit enhancements, guarantees, blended finance to improve risk-return profile for private capital in the irrigation sector.
- (iv) Develop guidelines for fair, transparent irrigation service pricing and cost recovery mechanisms to ensure commercial viability and sustainability of irrigation services.
- (v) Propose legal and institutional reforms to facilitate compliance and embed willingness to pay as well as willingness to charge.
- (vi) Develop project structuring template and criterion for multiple financing mix to be applied to different typologies of projects with regards to size, management, location, source of water etc
- (vii) Develop a media kit to create a buzz in the private sector to and elicit their desire to put capital into the irrigation sector.
- (viii) Outline irrigation sector transition roadmap with key milestones, sequenced action plan, and recommendations to create a conducive environment for sector growth.

4. Deliverables

The assignment is expected to be completed within a period of **2months tentatively (60 Days)from the date of contract signing** Table 1 shows the list of deliverables expected during this period timeframe and payment schedule.

Table 2 – Schedule of Deliverables

Tasks	Deliverables	Timeframe	Payment Schedule (%)
Inception	• Inception report, including workplan and proposed methodology for the assignment	2 weeks after contract signing	20

Completion of Task 1	• Irrigation Sector Investment and Financing Landscape Analysis Report	2 weeks after contract signing	30
Completion of Task 2	• Irrigation Sector Growth, Investments and Financing Scenarios Report	2 weeks after contract signing	30
Completion of Task 3	• Irrigation Services Delivery and Financing Enablement Plan	2 weeks after contract signing	20

5. Organization and Management Arrangement

The assignment will be coordinated by the State Department for Irrigation of the Ministry of Water, Sanitation and Irrigation through the NISIP Task Force appointed for the purpose. The Task Force will be responsible for liaison between SDI and the Consultant and will also provide any assistance required by the Consultant under the contract.

6. Personnel Qualification

The Consultant must possess the skills and expertise necessary for an efficient and effective delivery of outputs. The Consultant should be a financial expert and a holder of at least a master's degree in Finance, Economics or any other relevant field. S/he must have at least ten years general experience in finance and investment in the development sector and a member of a relevant professional body.

Specifically, the consultant must have:

- 1) At least 15 years of experience in economics and financial analysis of infrastructure sectors, with specific expertise in the irrigation sector or relevant sector.
- 2) Minimum of a Masters degree in economics, finance, business administration, or relevant technical field
- 3) Extensive experience conducting market assessments, financial modeling, and scenario development for irrigation sector or equivalent.
- 4) Knowledge of financing structures including PPPs, blended finance, bonds, loans, equities, and different sources of finance – private and public for the water/irrigation sector etc.
- 5) Strong financial modeling skills including forecasting, cost-benefit analysis, scenario modeling, sensitivity analysis, etc.
- 6) Excellent research, analytical, and quantitative skills
- 7) Experience working with government agencies and understanding public procurement and financing processes in Kenya or similar economies globally.
- 8) Knowledge of key irrigation sector stakeholders such as ministries, investors, multilateral banks, private services providers in Kenya and/or in the region.

- 9) Excellent writing and presentation skills to synthesize complex analyses into compelling deliverables and appealing visualizations.
- 10) Experience in data collection, conducting stakeholder interviews and focused group discussions
- 11) Specific experience in resource mobilization, donor relations or fundraising and partnerships.
- 12) Experience in action planning, including development and implementation of results framework
- 13) Been registered with the relevant professional body.

The consultant shall be considered as an independent person in performance of their duties and any person employed to do any work by the consultant shall be considered to be an employee of the consultant.

7. Obligation of the Client

In order to facilitate the smooth and effective implementation of this assignment, the SDI on behalf of the Government of Kenya, and through the Task Force will undertake to carry out the following:

- i. Seek proposals and engage appropriate Consultant/Expert to provide services for the above named study based on existing procurement procedures of the Government of Kenya.
- ii. Provide available information and data necessary to carry out the assignment
- iii. Appoint and facilitate efficient operation of the Taskforce.
- iv. Introduce the Consultant where necessary to relevant stakeholders as required for the proper execution of the assignment.

8. Obligation of the Consultant

- i. The consultant shall develop a business plan as specified in this TOR in a professional manner in keeping with internationally accepted standards, using qualified and appropriate staff. In the course of the assignment, the consultant may engage additional experts he may deem necessary to successfully undertake the assignment, but at no extra cost to the Client. The consultant and his team shall be ready and willing to work with the Task Force or any other SDI appointed staff.
- ii. The Consultant shall endeavor to provide the required services with diligence and within the time agreed upon in the contract.
- iii. At the end of the contract, all items procured for the study and included in the cost schedule proposal, or for which reimbursement was claimed and received shall be handed over to the Client. The Consultant shall also keep complete records of all work done under the assignment and hand over to the Client all documents, working papers, calculations and computer data produced during the assignment.