

**Republic of Kenya**



**MINISTRY OF AGRICULTURE, LIVESTOCK & FISHERIES  
STATE DEPARTMENT OF FISHERIES AND BLUE ECONOMY**

**KENYA MARINE FISHERIES AND SOCIO-ECONOMIC  
DEVELOPMENT PROJECT (KEMFSED)**

**TERMS OF REFERENCE  
FOR AN INDIVIDUAL CONSULTANT**

**To Undertake a Rapid Assessment of Fisheries and Aquaculture  
Information Management System (FIMS)  
in Kenya**

**DECEMBER 2017**

# 1 Background

## *1.1. Commitment to Blue Economy*

On May 2, 2016, in the Executive Order No. 1/2016, the Government of Kenya made a clear commitment towards a new approach, the blue economy, and taking into cognizance the importance of the sector to fuel the country's economic growth, created the State Department for Fisheries and the Blue Economy. The coastal and marine space on which a blue economy is potentially founded contains a myriad of different uses, some currently destructive or unsustainable, while others are renewable, some mutually exclusive and others compatible. More broadly, a blue economy approach is understood as encompassing a better integrated approach to these sometimes-conflicting uses of marine resources, living and non-living (including shipping, fossil energy and mining), and renewable or exhaustive. Too often, priority tends to be given to activities that generate short-term benefits but also have destructive and counter-productive longer-term consequences. In contrast, a blue economy approach is more proactive and embodies the need to focus on longer term sustainability.

The Presidential Blue Economy Committee established in September 2016, while recognizing the many sectors in blue economy prioritized fisheries and aquaculture; and maritime shipping and logistic services as priority sectors that would deliver fast socio-economic benefits to the communities in the coastal areas. To strengthen fisheries governance for sustainable utilization and enhanced revenues for the government and employment creation, the government enacted the Fisheries Management and Development Act 2016 in September, 2016. The Act established institutions that would strengthen the governance of the fishing industry and aquaculture, and enable investments along the fishery value chains for socio-economic benefits. The institutions established include the Kenya Fisheries Service, Kenya Fish Marketing Authority and the Fish Levy Trust Fund.

## *1.2. KEMFSED project*

To attain economic benefits from the coastal and marine resources, the Government of Kenya (GoK) through the State Department for Fisheries and the Blue Economy (SDF&BE) has requested the World Bank to support the proposed Kenya Marine Fisheries and Socio-Economic Development Project (KEMFSED). The GoK has received Project Preparation Advance from the World Bank towards the Kenya Marine Fisheries and Socioeconomic Development Project (KEMFSED). The KEMFSED project covers a period of 5 years.

The development project overall goal of KEMFSED is to enhance economic benefits and coastal livelihoods from marine fisheries and coastal aquaculture while safeguarding associated ecosystems' integrity. The implementing agencies will be the State Department for Fisheries & the Blue Economy (SDF-BE) on behalf of the Government of Kenya. In Kenya, 5 counties along the Coast have been selected to be beneficiaries for the project namely Kwale, Mombasa, Kilifi, Lamu, and Tana River Counties.

The KEMFSED project comprises of the following four components:

**Component 1:** Governance and management of marine fisheries and aquatic resources which aims to strengthen marine fisheries and coastal aquaculture governance so as to control over-fishing, maintain or improve stock productivity and enhance associated ecosystem integrity.

Sub-component 1 will focus on coordination and institutional strengthening to ensure fisheries and aquaculture resources are safeguarded in the context of implementing the blue economy framework. Sub-component 2 will be on strengthening existing Fisheries Information System (FIS) to ensure availability of integrated sectoral information to communicate the importance of fisheries and aquaculture sector in broader coastal developments. Sub-component 3 will aim at improving management of inshore/small scale fisheries. Sub-component 4 will aim at improving management of offshore fisheries.

**Component 2:** Promote investment in marine fisheries and coastal aquaculture which aims to promote efficient utilization and value-addition of the resources by increasing investment in the marine fisheries and aquaculture sector.

Sub-component 1 will focus on improving the business environment and private sector investment in the fishery and aquaculture sector whereas sub-component 2 will focus on modernizing fisheries infrastructure to enhance value addition.

**Component 3:** Strengthening Marine Fisheries and Aquaculture-based Livelihoods for Coastal Communities which aims to enhance social and economic benefits that coastal communities derive from sustainable use of marine living resources.

Sub-component 1 will be on strengthening capacity of coastal communities on entrepreneurial and organizational skills and sub-component 2 will aim at enhancing access to finance and grant support.

**Component 4:** This will be on project management which covers establishment and operationalization of a project coordination unit, fiduciary, environmental and social safeguards, and monitoring and evaluation functions.

The project is implemented by the State Department of Fisheries and Blue Economy of the Government of Kenya (GoK).

### *1.3. Fisheries sector context*

In Kenya, fisheries are mainly composed of freshwater (lakes, rivers and dams), coastal and marine (Indian Ocean) and aquaculture. The fisheries sub-sector is an important economic activity that generates a variety of benefits. The benefits include nutrition, food security, employment and trade development including exports and foreign currency. The sub-sector also contributes about 0.5% to the country's Gross Domestic Product (GDP) and towards conservation of fisheries resources. The sub sector is categorized into capture and aquaculture fisheries. The freshwater resources in Kenya include; lakes, dams and rivers. Further to these freshwater resources, Kenya enjoys a vast coastline of approximately 640 Km on the Western Indian Ocean and 200 nautical miles of Exclusive Economic Zone (EEZ) under its jurisdiction (12 nm) and sovereign rights. The Country's Exclusive Economic Zone (EEZ) of 230,000 Km<sup>2</sup> creates a huge opportunity for investors.

## **2 Rationale for the Consultancy**

During the implementation of a previous IDA and GEF funded project, the Kenya Coastal Development Project (KCDP), significant advances were made to strengthen fisheries management in the Kenyan marine fisheries sector. This included, amongst many others activities, Monitoring, Control and Surveillance (MCS), research, aquaculture development and fisheries management plans for priority fisheries.

However there remains elements of the broader fishery management system that are inadequate, particularly data capture and reporting. Fisheries management is supported by information that can be easily accessed, is accurate and is continuously updated. Towards the end of the KCDP, the development of an MCS database and information system was not effectively completed. The current Fishery Information Management System (FIMS) remains weak and does not provide the information base needed to support the management of Kenya marine fisheries. An effective FIMS integrates, or can report on, different elements used in fisheries management for example: catch and effort, vessel type and fishing gear, licensing and permitting, research data, compliance (MCS), deep sea fisheries data reporting, and IUU activity.

This consultancy will undertake a rapid assessment of the status of the fisheries information systems currently employed in Kenyan marine fisheries both at a national level (Nairobi) and at county level. This is particularly pertinent considering the administrative devolution of fisheries management to the counties and for the recently formed KeFS.

In the ongoing development of the KEMFSED, a Project Preparation Advance (PPA) is provided for activities that support development of the project. These TORs are therefore aimed at a consultancy, specifically to identify the need for improvement to the existing FIMs in Kenya or as needed advice on the development of alternative more efficient systems consistent with national, regional and international standards.

## **3 Objectives of the Consultancy Assignment**

The objective of the consultancy is to assess the current state of the fisheries information systems used in Kenya and advise on the way forward and provide guidelines for project activities.

## **4 Scope of the Assignment**

The consultant shall be required to specifically undertake the following:

- i. Provide a framework that illustrates the process of fisheries data collection from fisher to landing site, data recording on landing, submission and verification of data collected onward from landing site through county fisheries officers to national data capture point;
- ii. Identify and report on the data capture protocol of the data received at the central point of capture (counties and national government) and describe and assess institutional mandates for fisheries data collection in Kenya including synergies with the information system(s) used in fresh water fisheries, in particular Lake Victoria;
- iii. Identify if the data captured is an accurate reflection of the actual catch and effort (Frame surveys and CAS);

- iv. Include as far as possible any information systems related to aquaculture and fisheries marketing and the potential for these elements to be incorporated into any future integrated FIMS;
- v. Assess and document in detail the current FIMS used in each organization including:
  - a. IT system used (hardware) and software
  - b. Structure of the database used and functionality with respect to fisheries information
  - c. Adaptability of the system, frequency of upgrades, maintenance etc.
  - d. Compatibility between institutions
  - e. Data capture methods and logistics involved
  - f. Analysis and reporting capability – species and fisheries details, licensing and other related modules linked to the FIMS
  - g. Status of historical and current data capture
  - h. Data quality and usefulness
  - i. Clarify the specific data information requirements necessary to assess the main commercial species exploited and assess the adequacy of the system to provide those data;
- vi. Regarding institutional mandates, identify gaps and areas of overlap, and make recommendations for streamlining responsibilities.
- vii. Assess the capacity needs of the government and or county fishery institutions in Kenya to effectively carry out their tasks related to fisheries data collection, reporting and analysis. This should include landing sites and identification of species, recording of weights and fishing effort, accuracy of data reporting sheets, processing time etc.
- viii. Outline the mandatory reporting requirements to fulfill Kenya's international fisheries reporting obligations (e.g. FAO, IOTC) and any gaps or deficiencies
- ix. Provide a clear set of recommendations, including findings from (v) and design a work plan to be implemented by the KEMFSED to upgrade the existing FIMS in Kenya. The work plan should set forth necessary activities to be undertaken over a five-year period and include (a) system design (with hardware and software requirements, including their technical specifications), (b) data recording, data quality and reporting requirements/protocols, (c) necessary training and capacity building, (d) institutional responsibilities; and (e) any other features that will improve the overall fisheries information system in use in Kenya fisheries.
- x. As far as possible the recommended system(s) should be compatible with systems currently in use in the region and globally.

## 5 Expected Deliverables

The consultant will be expected to deliver the following:

- (i) An inception report with clear strategy, work plan and preliminary work schedule and proposed structure of the final report;
- (ii) A draft report containing a summary of the items mentioned in Section 4 (Scope of Work);
- (iii) A stakeholder workshop where the draft report including initial recommendation will be presented;
- (iv) A final report fully addressing all the items mentioned in Section 4 (Scope of Work) including stakeholder input and feedback;
- (v) A record of all meetings, focus group discussions, stakeholder consultation meetings, socio-economic and baseline data, database of the potential legal review matter and any other reports deemed relevant.
- (vi) Develop draft Terms of Reference for any critical related studies and or activities to be implemented by KEMFSED.

## 6 Timing and Reporting

The assignment is expected to utilize 9 weeks, including one mission to Kenya (Nairobi and Counties) and a second to undertake a workshop and validation of results and recommendations.

The following timelines are expected:

Activity	Timing / deadline
1. Submission of inception report and proposed project structure for the final report	Within 2 weeks from contract signature
2. Ongoing weekly update to be submitted to the Client	Ongoing until submission of final report
3. Submission of draft report	6 weeks from contract signature
4. Present the full draft report to stakeholders for review and validation meeting	8 weeks from signature
5. Submission of final report with all expected outputs incorporating recommendations and stakeholder inputs	9 weeks from signature

## 7 Supervision Responsibility

The consultant will report to the Acting Director General of the KeFS on all matters pertaining to the assignment.

## 8 Qualifications of the Consultant

The successful consultant should have:

- (i) a Master's degree or equivalent in a discipline related to fisheries or marine/coastal resources management or information system, with not less than fifteen (15) years of experience in a relevant field;
- (ii) At least 10 years of demonstrable experience working in a fisheries and/or natural resources and information systems. Experience specifically in fisheries management systems will be an added advantage;
- (iii) Wide experience and interaction with regional and international projects as well as good networks in fisheries management;
- (iv) Ability to communicate effectively in English both orally and in writing;
- (v) Strong report writing and analytical skills are required.

## **9 Payment Schedule**

The consultant will be employed under the lump-sum contract and paid as below:

- i. 10% of the contract sum shall be paid upon submission and acceptance of inception report;
- ii. 60% of the contract sum shall be paid upon submission and acceptance of draft report (#3 of timeline table);
- iii. 30% of the contract sum shall be paid upon submission of final report.