

Republic of Kenya



**MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES & COOPERATIVES
STATE DEPARTMENT FOR FISHERIES, AQUACULTURE AND THE BLUE ECONOMY**

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

**TERMS OF REFERENCE FOR A CONSULTANCY TO PROVIDE
TECHNICAL ASSISTANCE ON STOCK ASSESSMENT OF PRIORITY MARINE
FISHERIES IN THE COASTAL REGION OF KENYA**

Contract No. KE-MOALF-C1-2021-004-ICS

FEBRUARY 2021

1.0 Project Background

The Government of Kenya, through the State Department for Fisheries, Aquaculture, and Blue Economy (SDFA&BE) and with support from the World Bank, is implementing the Kenya Marine Fisheries and Socio-Economic Development (KEMFSED) project, which aims at supporting the country in its efforts to leverage emerging opportunities in the Blue Economy. The development project's overall goal is to improve management of priority fisheries and mariculture and increase access to complementary livelihood activities in coastal communities. The KEMFSED project, which will be implemented in Kenya's coastal counties including Kwale, Mombasa, Kilifi, Tana River, and Lamu, will strengthen the management of fisheries that are priority to coastal livelihoods, thereby securing stocks at sustainable levels of harvesting. At the same time, the project will strengthen coastal households' access to complementary livelihood activities toward diversifying sources of household income to reduce dependence on capture fisheries. By better managing and conserving marine and inland water resources, reducing illegal fishing activity, and enhancing the value of the fish products in the value chains, the sector is expected to enhance its contribution to the overall economy.

The project comprises of the following three components:

- 1) **Component 1: Improve Governance and Management of Marine Fisheries** will focus on improving the management of marine fisheries in Kenyan waters. Globally, marine fisheries are under increasing pressure through over exploitation, in part due to increasing demand for animal protein and to alleviate poverty in coastal communities, but also due to Illegal, Unregulated and Unreported (IUU) fishing;
- 2) **Component 2: Coastal Community Empowerment and Livelihoods** will contribute to the PDO by strengthening livelihoods in coastal communities through a combination of technical and financial support for the implementation of subprojects, improved access to micro-credit and complementary capacity-building and mentoring of beneficiaries;
- 3) **Component 3: Project Management** this Component will finance supplemental support for project management at both national and county levels to ensure coordinated and timely execution of project activities.

2.0 Rationale for the Consultancy

Fish resources are important renewable resources that support Kenya's blue economy, providing livelihoods, nutritional security. Fisheries also contribute to the development of the maritime trade sector through value addition and exports providing foreign currency. Broadly, fisheries in Kenya are categorized into wild capture and aquaculture fisheries. Capture fisheries include those in freshwater (lakes, rivers and dams), coastal impoundments and marine fisheries (Indian Ocean). Kenya has a

coastline of approximately 640 km and an Exclusive Economic Zone (EEZ) estimated to be 230,000 km² with significant economic potential for development and attraction of investors. The fisheries sector contributes about 0.5% to the country's Gross Domestic Product (GDP). The contribution of marine fisheries waters to the GDP is however considered proportionately low given the extent of the Kenyan coastline and EEZ.

Fisheries management aims to maximize fish yields while minimizing the risk of overfishing (when fishing intensity is too high) and ensuring that fish stocks do not become overfished (when the biomass gets depleted). Underpinning fisheries management is the Fisheries and Development Act which provides the legal framework for the development of Fishery Management Plans (FMP) and fishery-specific regulatory measures based on the best available scientific information. Despite the economic value, many of the exploited fishery stocks are either unassessed or the assessments are outdated, hampering effective management. During project preparation, six fisheries were prioritized for assessment: octopus, small scale purse seine fishery (ring net), deep water snappers (in the North Kenya Banks), shallow water prawns, small-scale tuna fishery and the inshore basket trap fishery to inform management. KEMSFED has invested in improving capacity to produce updated and timely scientific information for decision-making on the management of the selected priority fish stocks. The assessments will define reference points for monitoring stock status, provide forecasts of harvest levels against scenarios of fishing effort and make recommendations on sustainable harvest strategies to enhance sustainability. The stock assessments will be spearheaded by the Kenya Marine and Fisheries Research Institute (KMFRI) in collaboration with the Kenya Fisheries Service (KeFS) with participation of local universities and relevant NGOs. These Terms of Reference define the objective, scope of services and expected outputs of the consultancy.

3.0 Objective

The main objective of this assignment is to provide expert guidance to technical working groups responsible for undertaking stock assessment of six priority marine fisheries in coastal Kenya under the KEMFSED Project

4.0 Scope of service

This assignment will be carried out in respect to KEMFSED Component 1.1, namely stock assessment of priority fisheries. KEMFSED seeks to engage the services of a fisheries stock assessment specialist to provide technical assistance on the stock assessment of six priority fisheries (octopus, small scale purse seine fishery (ring net), deep water snappers (in the North Kenya Banks), shallow water prawns, small-scale tuna fishery and the inshore basket trap fishery).

The fisheries stock assessment specialist will work closely with the Component 1.1 Coordinator and Subcomponent Task Team leader to implement the following tasks:

1. Hold a virtual inception meeting with the Component 1.1 Coordinator and Subcomponent Task Team leader to present an inception report indicating the implementation strategy for the TOR.
2. Conduct a review of the baseline reports prepared during the KEMFSED project preparation phase on selected priority fisheries/species (State of Stocks of Priority Fisheries and the baseline assessment on governance and management effectiveness) and any other related reports to identify data gaps and needs for each fishery and make recommendations on minimum data requirements and sampling protocols.
3. Hold a planning meeting with technical working group leaders for each priority fisheries working group to present findings and the development of research strategies for each fishery including a 3 year phased work plan.
4. Conduct a training workshop for task teams and working groups with emphasis on fisheries stock assessment methodology including data-limited approaches and related software tools
5. Provide professional assistance to the technical working groups on fisheries stock assessment techniques that might apply to the framework of the project work plan and specific priority fisheries including (but not exclusively) :
 - i. Undertake a review of the stock assessment reports developed by the technical working groups.
 - ii. Develop harvest strategy recommendations and guidelines for each of the six priority fisheries.
 - iii. Review the bi-annual stock status reports of the six selected fisheries.
 - iv. Assist with the drafting of scientific and technical reports as well as develop policy briefs related to each fishery, provide oversight and scientific support and peer review for each of the 6 priority fisheries
6. Provide expert advice to the scientific and management working group (SMWG) and the Advisory Working Group (AWG) during scheduled meetings or as need arises

5.0 Expected Deliverables

The assignment is span 30 working days each year over the 4 year project period, and will amount to a total of 120 working days. The key deliverables and expected timeframe for delivery are as follows:

Deliverable	Month	1	2	3	4	5	6	7	8	9	10	11	12
• Inception review report (Year 1)													
• Research strategies for the fisheries under assessment reviewed and submitted (Year 1)													
• A training report on fish stock assessment (Year 1)													
• Draft report on stock assessment of prawn fisheries reviewed (Year 1)													
• Draft reports on stock assessment of small-scale tuna, octopus and basket trap fishery reviewed and submitted (Year 2)													
• Draft harvest strategies for the prawn and octopus fishery (Year 2)													
• Draft reports on stock assessment of small-medium pelagics (ringnet) and snapper fishery reviewed and submitted (Year 3)													
• Draft harvest strategies and policy guidelines for the small-medium pelagics (ringnet) and snapper fishery reviewed and submitted (Year 3)													
• Technical reports and policy briefs on stock assessment of the 6 priority fisheries reviewed and submitted (Year 2 to 4)													

6.0 Reporting Requirements

The Consultant will work in close coordination with the Component 1 Coordinator and the Sub-Component 1.1 Task Team Leader.

The Consultant is expected to communicate with them regularly as need arises through appropriate online forums (emails/skype/zoom).

7.0 Payment Schedule

Payment will be made to the Consultant under one contract in instalments following the achievement of project milestones as follows:

Year 1	1 st instalment of 25% of the professional fees (8 days) upon receipt of an original copy of this agreement duly signed by you in acceptance of terms and conditions of this agreement and submission of an acceptable inception review report outlining the implementation strategy for the TOR
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	2 nd instalment of 25% of the professional fees (8 days) upon receipt of the revised research strategies for the 6 priority fisheries under assessment and a training report on fish stock assessment
	3 rd instalment of 50% of the professional fees (14 days) upon receipt of technical progress reports on stock assessment of two priority fisheries
Year 2	4 th instalment of 50% of the professional fees (15 days) upon receipt of draft reports on stock assessment of small-scale tuna, octopus and basket trap fishery
	5 th instalment of 50% of the professional fees (15 days) upon receipt of draft harvest strategies for the prawn and octopus fishery
Year 3	7 th instalment of 50% of professional fees (15 days) upon receipt of draft reports on stock assessment of small-medium pelagics (ringnet) and snapper fishery
	8 th instalment of 50% of professional fees (15 days) upon receipt of draft harvest strategies and policy guidelines for the small-medium pelagics (ringnet) and snapper fishery
Year 4	50% of professional fees (15 days) upon submission of reviewed technical reports on stock assessment of the 3 priority fisheries
	50% of professional fees (15 days) upon submission of reviewed technical reports on stock assessment of the remaining 3 priority fisheries

8.0 Duration of Assignment

The total duration of this assignment is 120 working days and will be phased in line with the Subcomponent Work plan

9.0 Qualifications and Experience

The Consultant will be assessed against the following minimum qualifications and competencies:

- A master's degree in aquatic, fisheries, marine sciences or related fields from a recognized and reputable institution
- Degree in aquatic, fisheries, marine sciences or related fields from a recognized and reputable institution
- At least 10 years of relevant professional experience in marine fisheries stock assessment
- Demonstration of experience in the use of data-limited fisheries stock assessment methods and software
- Donor projects experience also required
- Teaching experience in related fields will be an added advantage

Key competencies:

- Strong analytical and research writing skills
- Good leadership, networking, teamwork and interpersonal skills.
- Good command in English