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 A CONSULTANT COMPANY OR FIRM

DEVELOPMENT OF INTERVENTION PORTFOLIOS TO INCREASE VALUE IN SELECTED MARINE PRIORITY FISHERIES IN KENYA

Including value chain analysis, market assessment, economic assessment of infrastructure needs and baseline valuations

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

In order 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 Government of Kenya 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 agency 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, Tana River and Lamu.

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 atimproving 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 1will 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 secretariat, fiduciary, environmental and social safeguards, and monitoring and evaluation.

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^2 creates a huge opportunity for investors.

During the implementation of a previous World Bank loan-funded project, the Kenya Coastal Development Project (KCDP), several infrastructure sub-projects were implementedincluding; (i) construction of an MCS center for the State Department of Fisheries in Mombasa;(ii) extension of KMFRI HQ office buildings in Mombasa; and (iii) upgrading of two fishery landing sites in Shimoni and Kibuyuni. However, the Kenyan marine fisheries sector still has further infrastructure needs in order fully to develop its potential. The KEMFSED project is taking a different approach to fisheries development, aiming to optimize the benefits generated from available marine fisheries resources through a Blue Economy development approach. This calls for interventions to unlock the potential and foster dynamic, enterprise-led development of the sub-sector. Given global trends and if properly exploited, it is believed the sub-sector could contribute more than 50% of Kenya's fish and fishery products. Kenya wishes to increase the value derived from capture fisheries and increase production from mariculture in a sustainable manner that is cognisant of other users of shared regional stocks.

In the ongoing development of the KEMFSED, a Project Preparation Advance (PPA) is provided for activities that support development of the project.
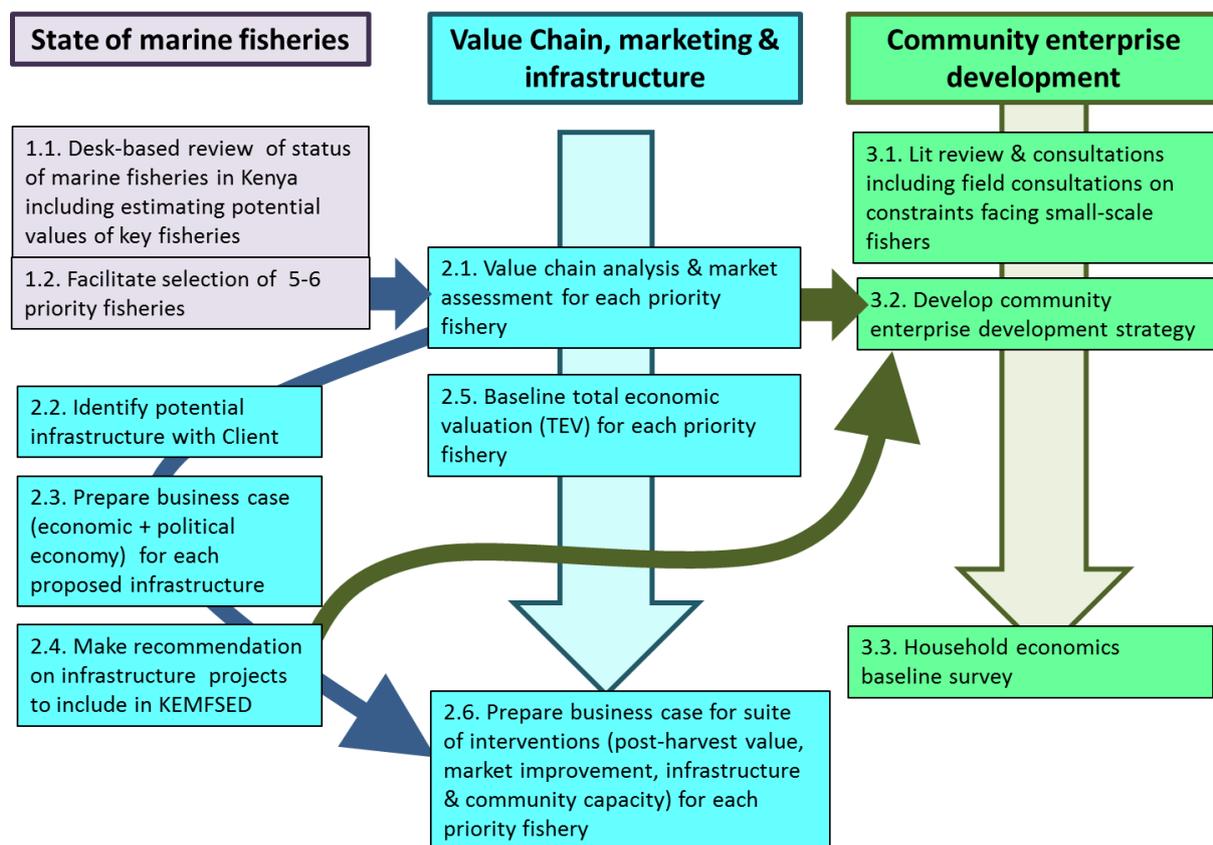

2. Rationale of the Assignment

This assignment is expected to generate, for each priority fishery targeted under the KEMFSED project, recommendations for a coherent portfolioof interventions that will support a significant increase in the value redeemed from the fishery, driven in large part by concomitant, enhancedprivate sector engagement and investment, as well as improved enterprise capacityat community level.

Value chain analysis and market assessment is expected toimprove understanding of the actors, economic dynamics and constraints ineach respective fisheries and to identify where there is potential to increase the value redeemed at different stages, through improving post-harvest handling, system efficiency, product quality, marketing, social and environmental standards etc. This will provide a framework toguide and support increased commercialization of each priority fishery, guide investment plans and marketing efforts and, not least, to identify how increased value can be secured by target community beneficiaries, and the capacity-building interventions needed to achieve that.

One important area of potential invention to increase value redeemed from the target fisheries is infrastructure development. This might range from supporting basic services at landing sites (transport access, power, clean water etc.), to more fisheries-specificinfrastructure tosupport improved handling, storage and transportation etc. In each case it is important that any proposed infrastructure: (i) is integrated into a broader portfolio of related, complementary interventions which, amongst other things, mitigate major sources of risk; (ii) is based on a coherent business case that justifies the investment economically and plans for its financial and operational sustainability; (iii) does not usurp investments that should normally come from the private sector, assuming a sound economic rationale; and (iv) takes account of the political economy of the target fishery and its marketing.

Thisproposed study is also expected to provide a baseline Total Economic Valuation (TEV) foreach selected priority fishery as a basis for measuring the impact and success of the KEMFSED project, with the expectation that the project will increase the economic value of the identified fisheries.

The assignment herein is linked to two other consultancy assignments contracted under KEMFSED project preparation. As shown in the figure below, a separate assignment to review the *State of Marine Fisheries* in Kenya will identify the priority fisheries that will be the subject of analysis in the assignment herein. In turn, the outputs from this assignment will inform a third *Community Enterprise Development*consultancythat will further develop a portfolio of community level interventions, in particular building community enterprise skills and access to credit that will be complementary to value chain, marketing and infrastructure improvements recommended herein.

3. Objectives of Assignment

The objective of this assignment is to provide direct input into the KEMFSED project preparation, generating for each targeted priority fishery recommendations for a coherent portfolio of interventions that will support a significant increase in the value redeemed for target beneficiaries from each fishery. Interventions should be based on a systematic analysis of fisheries value chains and marketing networks, and are expected to include proposals for infrastructure based on sound business case assessment. Finally the assignment will generating baseline valuations for each priority fishery for measuring future project impact.

4. Scope of Assignment

The assignment will be carried out in regards to KEMFSED project intervention areas namely; Kwale, Mombasa, Kilifi, Lamu, and Tana River Counties. It will include the following tasks:

4.1. Detailed value chain analysis for each priority fishery

i) Detailed mapping of the value chains for each priority fishery including core process, main actors (number and geographic distribution for each type of actor), flows, volumes, values at different levels and constraints to conducting business;

ii) Map the relationships and linkages between value chain actors and describe the power relationships that exist;

iii) Describe the existing sources of financing/capital for the various actors in the value chains and in particular the sources of credit for the catching sector and the role that this plays in reinforcing power relationships.

iv) Map the institutions and organizations supporting input supply, production, processing and marketing of the fish and fish products;

v) Identify and examine business, technical and capacity constraints and opportunities within the priority value chainsand recommend interventions to overcome them, drawing lessons from other countries regionally or globally with the provision that the interventions are appropriate to the local environment;

vi) Identify major production pockets, growth potential, and competitiveness of priority value chains (supply and demand) including prospects within the country and cross-border trade;

vii) Analyse dynamics of processing and value creation, reward distribution, value chain governance and power relation structures and knowledge transfer;

viii) Map the geographic location of different steps of each value chain for each priority fisheries to county and community level, such as to enable detailed planning of interventions (see 4.5) in terms of target areas;

ix) Highlight potentials for public-private partnerships (private sector - community partnerships)including processes for establishment;

x) Identify the underlying policy, institutional, and infrastructural issues that affect the sustainability and competitiveness of the priority value chains regarding the role of government and private sector, specify areas of which public sector can intervene and areas for the private sector support/investment;

xi) Analyse gender and social inclusion/pro poor perspective at all steps of value chain;

xii) Identify capacity needs for fisher associations to engage with private sector partners;

4.2. Market Assessment for priority fisheries value chains

i) Describe existing and identify potential local, national, and international markets for each priority fishery.

ii) Identify key constraints that impede effective and efficient marketing and distribution of priority fisheries products that need to be addressed in order to turn the fisheries into robust and functional market oriented value chains.

iii) Examine the marketing channels at local, regional and international levels.

iv) Map out the existing and untapped marketing channels (both formal and informal) and estimate approximate contribution of each channel to the overall fish business turnover;

v) Assess entry requirements into the identified markets;

vi) Analyze market trends and dynamics for the identified markets e.g. volume of transactions, current value additions and product diversification possibilities including use of technologies, flow of market information; and access to information;

vii) Assess characteristics of the fish market (actual and potential) at the end consumer level in terms of variety, quality, and pricing, purchase behavior including channel preference and associated reasons;

viii) Explore market margins involved and the possibilities of capturing value in different stages of the chain like wholesaling, processing and retailing;

ix) Assess role and involvement of women at various stages of supply chain and how this can be further strengthened.

4.3. Identify and prepare business cases for proposed infrastructure interventions

i) Undertake a review of existing infrastructure and processing facilities for:
  - marine fisheries landings in Kenya [where possible physical review]
  - landing of offshore (tuna and tuna-like) catches in other countries in the region (WIO), including review of their business models and profitability [desk review]

ii) drawing on the analyses in 4.1 and 4.2 above, and through consultation with the Client, identify a provisional list of potential infrastructure investments that would increase in value of marine capture fisheries in Kenya. Such list may potentially include, but is not limited to: (i) improvement of basic services at landing sites (transport access, power, water etc.), (ii) infrastructure to improve landing, handling and transportation of nearshore catches; (iii)) infrastructure to improve landing, handling and transportation of offshore catches.

iii) For **each** of the above-proposed infrastructure developments, prepare a business case that includes:
  - how the proposed infrastructure would be expected to add value to the marine fisheries sub-sector, with reference to target priority fisheries;
  - quantitative justification of the above in terms of potential landings, potential increase in value, other economic or social benefits;
  - broadly estimated costs of (a) construction and (b) annual operations and maintenance of the proposed infrastructure, based on similar examples from elsewhere;
  - assessment of the economic rate of return for each proposed investment based on (ii) and (iii) above;
  - analysis of the respective roles of (a) the public sector (Govt), (b) the commercial private sector and (c) civil society/communities in terms of the likely use, derived-benefits and operational management of the proposed infrastructure;

- appropriate reference to political economy issues for each proposed investment, particularly in the case of any proposed infrastructure for landing offshore catches, with reference to the analysis provided under 3.4 above;
- a synthesis of the above factors, drawing conclusions on the strength of justification for each proposed infrastructure in terms of (a) its viability and sustainability with reference to the fisheries resource-base; (b) proportionality in terms of investment cost versus accumulated benefit (however defined); (c) financial viability in terms of operational and maintenance costs; (d) respective investment roles of public and private sector and (e) any other factors identified/deemed important by the Client or the Consultant identified during the assignment.

iv) Make recommendations for infrastructure investments proposed for inclusion in the KEMFSED project based on the findings above. The scale, scope and/or capacity of any proposed infrastructure investments should be specified based on the analysis in (iii) above, sufficient to inform engineering design and budget estimation.

4.4. Recommendation for interventions supported by KEMFSED project:

Based on the analysis conducted under [4.1]to[4.3] above, outlinea portfolio ofrecommended interventions for each priority fishery, with accompanying business case,that can be considered for inclusion in the KEMFSED project workplan and budget, with attention to the following:

i) each portfolio of recommended interventions for each priority fishery should be strategic and should be integrated into a clear theory of change or results chain that delivers an outcome of increased value to identified beneficiaries;

ii) consider a range of types of intervention including infrastructure improvement or development; capacity-building of beneficiaries; technology trials (eg for marketing information and networking); facilitation of investment or access to credit; information, awareness and communications;

iii) systematically consider every specific stage in each identified priority fishery value chains and highlight only the most promising interventions that will specifically enhance either the value redeemed, or the number of beneficiaries, for that stage;

iv) consider (i) reducing post-harvest losses; (ii) improved processing, quality, packaging and other value addition of primary products; (iii) exploring new marketing opportunities;

v) proposed interventions should apply lessons from other countries regionally or globally, provided they are locally relevant;

vi) description of interventions should be as specific and detailed as possible including a general approach/methodology, geographic scope (to county and target community level), beneficiaries targeted, timeframe in years, and approximate budget;

vii) recommendations should concise avoiding generalizations that are difficult to implement and likely to be ineffective.

4.5. Baseline total economic valuation for each priority fishery

i) Calculate the current total economic value (TEV) for each priority fishery, based on the values and structural characteristics identified for each in (4.2) above;

ii) Within the total economic valuation for each priority fishery, show the breakdown of values and numbers and geographic distribution of beneficiaries for each major stage in each value chain.

5. Expected Deliverables of this assignment

The consultant will be expected to work closely and in consultation with the Project Preparation Team (PPT) under the direction of the Acting Director General of the KeFS. *The Consultant will submit a brief update at the end of **each week** summarizing progress and outlining next steps.*

Key deliverables include the following reports:

5.1. **Inception Report**: To be submitted within 7 days of contract signing, the report will specifythe approachand work plan for undertaking the consultancy and the proposed structure for the final report;

5.2. **Weekly email progress update:** a brief update of progress emailed to the Client;

5.3. **Draft Report on Proposed strategic interventions to increase value in priority marine fisheries in Kenya**: This report should be close to final report interms of content (see 5.4 below)in that it must contain the output from scope of work [4.1] to [4.4] except that it does not need to contain the total economic valuations [scope of work 4.5] which may be included in the final report only.

The consultant will present key findings of the draft final report in the form ofPPTto the Client and other key stakeholders for comment and input.

5.4. **Final Report on Proposed strategic interventions to increase value in priority marine fisheries in Kenya including baseline valuations**: The final report should provide details of:

(i) Findings, conclusions and recommendations of the value chain analysis and market assessment, as per scope of work 4.1 and 4.2 respectively,containing specific, viable recommendations for the project interventions that will sustainably enhance the value redeemed by target beneficiaries from the selected priority fisheries;

(ii) A review of national and regional infrastructure relevant to marine fisheries landings as per scope of work 4.3[i];

(iii) Business case assessments for each proposed infrastructure, with conclusions on strength of justification for each, as per 4.3[iii] and 4.3[iv];;

(iv) Recommendations for infrastructure investments based on the above, specifying the appropriate scope/scale and/or capacity of each (or a reasonable range) sufficient to guide engineering designs and budget estimation.

(v) Portfolio of recommended interventions to increase value of each priority fishery, with accompanying business case justification and theory of change/results chain;

(vi) Total economic valuations (TEV) for each priority fishery for use as a baseline in monitoring outcome and success of KEMFSED project;

(vii) Primary and secondary data gathered, employing annexes as appropriate;

(viii) Power Point presentation on key findings & recommendations(as per 5.3 above).

6. Duration of the assignment

The assignment should commence immediately upon contract signing, and is expected to be completed within 12weeks.

Output	Week	1	2	3	4	5	6	7	8	9	10	11	12
1. Inception Report		▓											
2. Weekly email progress			▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	
3. Draft Final Report			▓	▓	▓	▓	▓	▓	▓	▓	▓		
4. Final Report												▓	▓

Suggested input by the identified key experts:

Key Expert	Estimated time input (days)
1. Value Chain Specialist	40 days
2. Fisheries Post-Harvest Specialist	25 days
3. Fisheries Marketing Specialist	25 days
4. Fisheries Infrastructure Economist	35 days
Team leadership & report co-ordination role	+ 10 days

7. Qualifications and experience

The work shall be carried out by a suitably experienced firm or institution that will propose a team including, at minimum, the following four key experts, one of which will also take the role of overall Team Leader: (i) a Value Chain Specialist; (ii) a Fisheries Post-Harvest Specialist; (iii) a Fisheries Marketing Specialist; and (iv) a Fisheries Infrastructure Economist. The consultancy firm may include other team members as necessary to fulfill the terms of reference herein. The qualifications, experience, roles and responsibilities of all team members should be detailed in the firm's technical proposal.

(i) Value Chain Specialist
  - postgraduate degree in economics, business studies or related discipline relevant to this consultancy;
  - at least 15 years demonstrated experience in analyzing and strengthening value chains in agriculture, natural resources or fisheries sectors;
  - significant demonstrated experience with methodologies appropriate for calculating total economic value in the context of agriculture or natural resources value chains;

- additional credit for relevant work experience in Kenya (any value chain sector) or the South West Indian Ocean fisheries sector;
- significant demonstrated experience in preparing high quality technical reports of international standard;
- ability to communicate effectively in English orally and in writing, able to communicate complex, technical information to both technical and general audience;
- demonstrable, strong analytical skills are required
- strong IT literacy and competency

(ii) <u>Fisheries Post-Harvest Specialist</u>
- at least Masters' Degree in fisheries or a related field
- at least 15 years demonstrated work experience in a technical role related to marine fisheries processing and value addition;
- significant demonstrated experience of marine fisheries processingand value addition in other comparable countries in the Indo-Pacific;
- demonstrated experience and familiarity with processing and value addition technology relevant to Kenyamarine fisheries such as lobster, tuna and tuna-like species, small & medium pelagics, aquarium fish, octopus etc.
- significant demonstrated experience in preparing high quality technical reports of international standard;
- ability to communicate effectively in English orally and in writing, able to communicate complex, technical information to both technical and general audience;
- demonstrable, strong analytical skills; strong IT literacy and competency

(iii) <u>Fisheries Marketing Specialist</u>
- at least Masters' Degree in fisheries or a related field
- at least 15 years demonstrated work experience in a technical role related to marine fisheries marketing;
- significant demonstrated experience of marine fisheries marketing in other comparable countries in the Indo-Pacific;
- demonstrated experience and familiarity with national, regional and international marine fisheries marketing networks relevant to Kenyamarine fisheries such as lobster, tuna and tuna-like species, small & medium pelagics, aquarium fish, octopus etc.
- significant demonstrated experience in preparing high quality technical reports of international standard;
- ability to communicate effectively in English orally and in writing, able to communicate complex, technical information to both technical and general audience;
- demonstrable, strong analytical skills; strong IT literacy and competency

(iv) <u>Fisheries Infrastructure Economist</u>
- post-graduate degree in fisheries science, natural resources/environmental economics or similar;
- at least 15 years' overall work experience with at least 10 years' undertaking economic assessments related to fisheries infrastructure;
- demonstrated experience in cost-benefit analysis relating to fishery infrastructure investments with emphasis on developing world fisheries;
- demonstrated experience with regional industrial fisheries in the western Indian Ocean and a strong understanding of the regional political economy of that sector;
- significant demonstrated experience in preparing high quality technical reports of international standard;
- ability to communicate effectively in English orally and in writing, able to communicate complex, technical information to both technical and general audience;
- demonstrable, strong analytical skills; strong IT literacy and competency

<u>Team Leader</u>

In addition the designated Team Leader (from the above four) should have experience leading a technical team on at least three comparable consultancy assignments for multi-national, multi-lateral or bilateral clients;

8. Payment structure and timeframe

Payment terms will be based on completion of agreed milestones as per contract agreement and shall be made as per the following schedule:

(i) 20% - Upon submission & acceptance of the Inception Report
(ii) 40% - Upon submission & acceptance of a Draft Final Report
(iii) 40% - Upon submission& acceptanceof the Final Report

9. Supervision & working relations

The contract will be managed by the State Department for Fisheries and Blue Economy. The Acting Director General of the KeFS will be the contact person on all matters pertaining to the assignment. The consultant will provide an update on a weekly basis with regards to progress to both the acting Director general and World Bank counterpart.