

ecosystem conservation, and sustainably protecting marine conservation areas (MCA) in PECCA, and (3) Improving local community livelihoods through introduction of alternative income generating activities.

Pemba Channel Marine Conservation Area (PECCA)

The island of Pemba, Tanzania is a remarkable and unique island in the Western Indian Ocean (WIO). It contains high levels of biodiversity, important feeding and breeding areas for many species and migratory routes for marine mammals. The western side of the island has an indented coastline with numerous bays, islets and deep braided channels that form the basis of its diverse marine habitats. The island is also home to the WIO region's only oceanic reefs in the East African Marine Ecoregion (EAME).

The western seaboard of Pemba is within the Pemba Channel Marine Conservation Area (PECCA). Established in 2005, PECCA covers 825.8km² extending 3.22 km offshore at its widest point. Bordering the deep-water channel that drops to over 1000m, PECCA encompasses a diversity of coastal and shallow and deepwater ecosystems, marine habitats and species diversity. PECCA is administered through the Collaborative Management Unit of the Department of Marine Conservation within the Ministry of Blue Economy and Fisheries. PECCA consists of six (6) management areas that are collaboratively management by PECCA management and communities.

Demonstration activities are being implemented at Management Area No 3 in the Pemba Channel Conservation Area. The project's activities are being implemented by First Vice President's Office (FVPO) and the Ministry of Blue Economy and Fisheries (MoBEF) in collaboration with 11 Shehia Fishing Committees in management area 3. A collaborative ecosystem-based environmental management and fisheries plan is in development but requires finalisation through the definition of marine spatial planning (MSP) and planning frameworks for the implementation of management measures such as area closures, habitat restoration and income diversification. Finalisation of the MSP and these planning frameworks will provide case studies to contribute to the development of guidelines for similar initiatives in the other management areas of PECCA and other Marine Conservation Areas (MCA) in Zanzibar archipelago. These case studies will be utilised by the newly formed Stakeholder Management Committee in PECCA to define general guidelines for ecosystem based environmental and fisheries management and marine resource collaborative management planning, reviewed, and validated by the Stakeholder Management Committee (SMC) and the 11 Shehia fishing committees in Areas 3 of PECCA.

The demonstration project is funded by two projects being executed by the Nairobi Convention: (1) The Strategic Action Programme Policy Harmonization and Reforms (SAPPHIRE) project implemented by UNDP and executed by the Nairobi Convention Secretariat with funding from the Global Environmental Facility (GEF). SAPPHIRE project aims to achieve effective long-term ecosystem management in the Western Indian Ocean (WIO) Large Marine Ecosystems (LME) in line with the Strategic Action Programme (SAP) for sustainable management of the Western Indian Ocean Large Marine Ecosystems (LMEs). The project supports the demonstration of development of ocean policy and management strategies at the national level in line with the blue economy and through intersectoral management approaches. (2) The Partnership Project between the Nairobi Convention (NC) and the South West Indian Ocean Fisheries Commission (SWIOFC) for coastal governance and fisheries management for sustainable blue growth (NC-SWIOFC PP). The partnership

project is funded by the Swedish International Development Cooperation Agency (SIDA) and jointly implemented by the SWIOFC and the Nairobi Convention. The project seeks to enhance the resilience of livelihoods based on Western Indian Ocean marine and coastal ecosystem and habitats, to promote sustainable management of coastal fisheries using the ecosystem approach to fisheries, and to enhance coordination between fisheries and environmental management institutions at national and regional level. In particular, the project will support local marine spatial planning and the development of management plans/strategies for adoption at national level for the conservation of selected critical coastal habitats with a shared concern for fisheries and environmental management.

The Nairobi Convention Secretariat required the services of an experienced and qualified expert to lead the development of participatory and evidence-based marine spatial planning and the development and validation of an integrated environmental management plan for communities of Area 3 of the Pemba Channel Marine Conservation Area.

C. PURPOSE AND OBJECTIVES

The objective of consultancy is to lead and provide technical services to stakeholders to engage in marine spatial planning and development of the management plans. The consultancy will involve the development of participatory and evidence-based marine spatial planning and the development of a comprehensive stakeholder validated integrated environmental management plan for communities of Area 3 of the Pemba Channel Marine Conservation Area.

D. DUTIES AND RESPONSIBILITIES

Under the general supervision of the Head of the Secretariat of the Nairobi Convention, and direct supervision of the project manager the *Consultant* will support the mapping of Area 3 of PECCA, identify the various marine uses, overlaps and possible use conflicts, and provide technical support during the validation of management plans emanating from the marine spatial plans. Specifically the consultant will undertake the following activities:

1. Obtain detailed mapping of the Pemba Channel Conservation Area showing:
 - i. General map of Pemba archipelago and the existing zonation.
 - ii. Pemba currents, eddies, tides and stratification in the PECCA, including environmental forcing physical data (temperature, salinity, pH, wind) and related climate data. Identify gaps in data such as nutrients, sedimentation/erosion and water quality data
 - iii. Map showing critical habitats designated areas, marine protected areas, locally managed marine areas, lagoons, bays, large shallow inlets, sandbanks.
 - iv. Map showing species abundance, distribution, and primary productivity (endemic, exotic, flagship, indicator, keystone, habitat forming, target or vulnerable species).
 - v. Identify data gaps such as various suitability areas e.g. for aquaculture and 'rigid' restrictions for e.g. fishing area, no-take areas, seaweed farming areas, fish closure areas including seasonal closures.
2. Through a participatory process, obtain maps of Area 3 showing data layers of human use from available socioeconomic datasets:
 - i. Residential rural/urban areas and ports/harbours
 - ii. Human population and distribution.

- iii. Shoreline exploitation and marine uses (agriculture, transport and shipping, forestry, offshore and nearshore fishing areas) and catchment.
- iv. Map showing Area 3 fish nursery areas
 - v. Abundance of fishing boats, fish landing sites and amounts of targeted species.
 - vi. Types of fishing gear
 - vii. Mariculture farms (seaweed, octopus, sea cucumber, oyster cultivation)
 - viii. Sources of energy (oil, gas, mining)
 - ix. Sand and gravel extraction, dredging, dumping.
 - x. Marine cables, pipelines, jetty
 - xi. Tourism data
 - xii. Cultural and religious sites
- 3. Through a participatory process, obtain maps showing existing governance measures
 - i. multi-sector uses in Area 3 e.g. protected areas and shipping traffic interactions.
 - ii. Existing management measures
 - iii. Future needs of existing or proposed uses
- 4. In a participatory approach, incorporate aspects of community-based coastal and marine management by engaging all stakeholders and sectors in Area 3
 - i. Participate in open stakeholder meetings facilitated by the Department of Environment and Department of Marine Conservation and partners for a participatory approach and validation of Area 3 maps
 - ii. Build the capacity of Fisheries Management Committees and other relevant local personnel in data collation and mapping to be able to actively engage in the MSP process and to support and implement similar work.
 - iii. Support data analysis under (a) (b) (c) above to be visualized easily on maps.
 - iv. Undertake value addition of data by assessing possible cumulative impacts of human uses in Area 3
 - v. Ensure maps developed for Area 3 are shared with stakeholders and sectors for participatory input on the environmental, economic, socio-cultural, and inter-sectorial data layers,
 - vi. Participate in the validation exercises on inputs for balancing potential competing uses and identify any data gaps and plan for data collection and creation.
- 5. Participate in stakeholder meetings facilitated by the Department of Environment and Department of Marine Conservation and contribute to discussions on the broader cross-sectoral management processes and systems for Area 3 of PECCA.
 - i. Participate and contribute to the development of a Management Plan for Area 3 in consultation with all stakeholders to enable production of the required management plan.
 - ii. Work with Marine Conservation Area (MCA) managers, Department of Marine Conservation (DMC, within the Ministry of Blue Economy and Fisheries (MoBEF, Zanzibar) Unit Officers, and Department of Environment, and active NGOs in the PECCA area to operationalise the Private Sector-NGO Forum and the Stakeholder Management Committee (SMC) in Area 3 of PECCA
 - a. identify appropriate interventions including the establishment of the PECCA Stakeholder Management Committee

- b. Finalise the collaborative management agreements with communities, private sector, and NGO partners for the implementation of the validated management plan within the marine conservation area (MCA) – Area 3 of PECCA.
- c. Update all community designated fishery closures and types in Area 3 of PECCA area including planned ones, review and incorporate planning process for establishing community fishery closure zones.
- d. Define roles and responsibilities and operating procedures for the Stakeholder Management Committee in PECCA
- e. Working with the SMC, DMC, DoE and MoBEF include Management Plan activities in the annual workplans and budgets for the Area 3 Marine Conservation Area

E. EXPECTED OUTPUTS/DELIVERABLES

1. Inception report with a detailed work schedule articulating understanding of the roles and responsibilities under this consultancy with a detailed background literature of the project area.
2. A clean, validated detailed map layers of PECCA management area 3 including fishery closure areas, conservation areas, landing areas, restoration areas, fishing areas, seaweed area, urban/port/market/ on land, marine transport area, seagrass, corals, socioeconomic uses, and governance layers.
3. Validated General/Environmental Management Plan for Area 3 of PECCA developed using a participatory stakeholder approach, detailing collaborative management agreements, community designated marine uses and management, roles and responsibilities, partnerships, community collaboration in monitoring, annual workplans and budgets.

F. QUALIFICATIONS

Education

- Advanced university degree (Master's degree, PhD) in the field of ecology, marine science, coastal ecosystems management, or any related discipline.

Experience

- A minimum of 7 years of professional experience in developing and/or implementing programmes on coastal ecosystems conservation, natural resources management (ecosystem management, community engagement, collaborative marine resource management plans and management measures, implementation of marine resource management activities with Governments etc.); Demonstrated knowledge and experience for obtaining ecological, social and economic geospatial data, good understanding of adaptation science from a socioecological perspective, and working experience with coastal communities in the Western Indian Ocean (WIO) is required. Experience working with coastal communities and different stakeholders at both strategic and technical levels and demonstrated quality and timely delivery is required. Working knowledge in Tanzania and experience of working with Government and intergovernmental programme would be preferred. Experience working in a multidisciplinary set up with government, non-government stakeholders including local communities on natural resource management matters in the WIO region.

- Fully computer literate (Microsoft Office, Internet) and in geographic information systems (e.g. ArcGIS) in preparation and delivery of presentations and efficient information materials

Language

- Fluent in English (both written and spoken). Knowledge of spoken and written coastal dialects of Kiswahili will be an asset. Ability to travel to and work in the Nairobi Convention countries.

G. DURATION OF THE CONTRACT

Implementation of the duties and responsibilities will be 90 days spread over a period of five (5) months from the date of award of contract.

H. TRAVEL AND RELATED COSTS

The contract will require the consultant to travel to Pemba. Cost of travel to Pemba will be organised separately in consultation with the Secretariat of the Nairobi Convention.

Local transport within Pemba will be organized by the consultant, in close consultation with the project manager, up to a maximum reimbursable amount of USD 4,800, to be paid at the first instalment of payment to support the delivery of the Activities 1-5 (above) involving, cumulatively, 30 days of local travel to project sites in Area 3 of PECCA for data gathering, collection and collation of socioeconomic and governance data, ground truthing of map layers for Management Area 3, and for participatory consultations with stakeholders for production of Area 3 General/Environmental Management Plan.

I. SCHEDULE OF PAYMENT

As for payment of the services performed under the terms of this consultancy, the Nairobi Convention Secretariat shall pay up to a maximum of USD 25,000 for the tasks, payable in four instalments as follows:

- (a) The first instalment of USD 5,000 will be paid upon submission of an inception report with a detailed work schedule and background literature of the project area, threats, challenges, opportunities for PECCA management, and potential data gaps.
- (b) The second instalment of USD 7,000 upon implementation of Activities 1, 2 and 3 and field activity to fill in identified data gaps.
- (c) The third instalment of USD 7,000 will be paid upon submission of a clean, validated detailed map layers and features of PECCA management Area 3.
- (d) The fourth and final payment of USD 7,000 paid upon submission of a validated Environmental Management Plan for Area 3 of PECCA developed using a participatory stakeholder approach.

J. LEGISLATIVE AUTHORITY REFERENCE

The contracting parties to the Nairobi Convention wish to promote responsible management of natural resources. Subsequently, they have adopted decisions to strengthen the implementation of the Convention through the Decisions of the 2021 Conference of Parties.

UN Agency to UN Agency Contribution Agreement between FAO/SWIOFC and UNEP/Nairobi Convention 2019-2023 for Component 1 of “A Partnership for Marine and Coastal Governance and Fisheries Management for Sustainable Blue Growth”

K. FUNDING

Source of Funds Regular Budget Extra-budgetary

Allotment Account / Coding Block:

Nairobi Convention–SWIOFC partnership project

Coding block: M99/11244/32QAW/14AF0001/S1-32QAW-000004/SB-009262.08.01