

## CONSULTANCY

### TERMS OF REFERENCE

#### MAPPING AND CHARACTERIZING THE SEAGRASSES IN THE RUMAKI AND '*RUFJI-MAFIA-KIBITI-KILWA BIOSPHERE RESESRVE*' TO ENHANCE HABITAT & SPECIES CONSERVATION AND MANAGEMENT IN THE SEASCAPE AREA

##### 1. INTRODUCTION

WWF Tanzania Country Office (WWF TCO) through Marine Programme is currently implementing a project titled “Coastal Community-based Conservation in Indonesia and the Western Indian Ocean” implemented in Mafia Island, Kilwa, Kibiti, Kigamboni, Mtwara Rural and Mkuranga districts. The purpose of the project is to strengthen community resilience through adaptive marine resource management in two highly biodiverse regions—the Sunda Banda Seascape in Indonesia and the Western Indian Ocean—ensuring that conservation delivers durable and equitable benefits for communities that depend on them.

Seagrass meadows are exceptionally productive ecosystems, offering a wide range of ecological benefits to both coastal ecosystems and communities. These benefits encompass coastal protection, support for fisheries, and their role in mitigating climate change by absorbing anthropogenic-generated carbon dioxide (CO<sub>2</sub>). Furthermore, seagrass plays a pivotal role in sustaining coral reefs and mangrove ecosystems, underscoring the significance of including them in any integrated coastal zone management (ICZM) initiatives. However, despite their importance, seagrass meadows have declined in many parts of the world, and Tanzania is no exception, mainly due to human activities. To ensure the protection of seagrass meadows, it is essential to implement well-informed management strategies. In Tanzania, specifically in the RUMAKI seascape, seagrass management strategies face challenges due to insufficient information on their seagrass distribution and a lack of community awareness regarding these vital ecosystems. Therefore, there is a pressing need to establish sound management strategies based on scientific information to safeguard the seagrass meadows effectively in the RUMAKI seascape.

The WWF Tanzania Country Office (WWF TCO) through the Seascape Programme is undertaking several conservation efforts in the ocean and coastal habitats -- the coral reefs, mangroves, sea weed and coastal wetlands. The programme is planning to incorporate seagrass management for climate risk resilience, a pivotal component for Integrated Coastal Zone Management (ICZM), in seagrass hotspot areas in order to strengthen climate change adaptation measures within coastal communities while simultaneously supporting their livelihoods.

Seagrass meadows provide food and shelter for sea life, including endangered species such as seahorse, whale sharks and turtles. The plant keeps oceans clean and healthy by absorbing harmful nutrients and reducing the incidence of pathogenic marine bacteria by 50%. They also work as an acidification buffer, protecting vulnerable ecosystems and species, such as coral reefs. Seagrass helps mitigate the effects of climate change through carbon sequestration. Despite covering only [0.1% of the ocean floor](#), seagrass meadows are incredibly effective carbon sinks and store up to [18% of the world's oceanic carbon](#).

Currently, WWF TCO is seeking for a team of consultant(s) to conduct a baseline assessment of seagrass distribution within the RUMAKI seascape with focus on the **newly nominated '*Rufiji-Mafia-Kibiti-Kilwa Biosphere reserve*' which includes the Mafia Island Marine Park (MIMP)**,

**the Collaborative Fisheries Management Areas (CFMAs), the Ruins of Kilwa and Songo Mnara and the Rufiji Delta mangrove area and Ramsar site. Where possible the team will include Kigamboni and Mkuranga districts as part of the project area.** Moreover, the consultants will play a key role in fostering community awareness about the importance of seagrass meadows and promoting community restoration initiatives.

## **2. OBJECTIVES OF THE CONSULTANCY**

The overall objective of this project is to map the distribution of seagrass meadows in the RUMAKI seascape, enhance community awareness of their importance, and support community-based seagrass restoration. Specifically:

- (a) Mapping the distribution of seagrass meadows in the RUMAKI seascape, aiming to create comprehensive spatial data that accurately represent the extent and locations of these vital ecosystems.
- (b) Describing the environmental, biological, ecological and ecosystem importance of sea grasses to the fish species and other Endangered and Protected species such as whale shark, dugong, sea turtles, Dolphin and others.
- (c) (b) Raising community awareness about the importance of seagrass meadows and their restoration, with the goal of fostering a deeper understanding among local communities about the ecological significance and potential benefits of preserving and rehabilitating seagrass habitats.
- (d) (c) Providing training to local communities on available seagrass restoration techniques, equipping them with the necessary knowledge and skills to actively participate in and support the restoration efforts.
- (e) Translating seagrass species into local names (Swahili names) to facilitate better communication and understanding between scientists, conservationists, and the local communities, thus strengthening collaborative efforts in seagrass conservation and restoration initiatives.

## **3. EXPECTED RESULTS / DELIVERABLES**

- (i) Inception report outlining the study's methodology, work plan, and objectives to be submitted for review and approval.
- ii) Draft report containing comprehensive findings, analysis, and conclusions, to be reviewed by stakeholders and experts for feedback and suggestions.
- iii) Final reviewed report incorporating the feedback received during the review process, presenting a complete and well-documented study.
- iv) Final report with well-aligned chapters for each specific objective, providing a clear and organized presentation of the research findings and their relevance to each objective.
- v) Seagrass map showcasing the distribution of seagrass meadows in the priority areas within the RUMAKI Seascape, offering valuable spatial information for future conservation efforts.

- vi) An annex of baseline indicators to be monitored for sustainable seagrass management and conservation, providing a foundation for ongoing monitoring and assessment of seagrass ecosystems.
- vii) At least 20 high-resolution photographs from the field, capturing seagrass meadows and seagrass restoration demonstrations in the study sites.
- viii) Design and production of 100 copies of A2 wall posters with adhesive glue to indicate sea grass species for community awareness and capacity building (local and scientific names)

### **3.1 The structure of the final report should include the following:**

- Title page
- Table of content to three levels
- List of annexes as appropriate
- Table of tables, figures, and pictures
- Abbreviations and acronyms
- Executive summary (1 to 2 pages)
- Introduction
- The main body is divided into different sections as appropriate, with Context, Methodology and key results findings
- Performance in relation to expected results and discussion (up to 25-40 pages) including annexes which will include graphs and tables.
- Conclusions and recommendations (each recommendation must be preceded by a conclusion, which refers to a discussion in the main body of the report)
- Annexes as required including Terms of Reference, Schedule, and People involved in the study
- The report should be produced in MS Word format and will be available in electronic form, both in Word copy and all the elements together in a single file pdf format

### **4. IMPORTANT METHODOLOGY**

The consultant(s) will employ various methods, including in-situ/field surveys, literature review, seagrass mapping, field demonstrations, training, and interviews with community members and practitioners. These approaches aim to gather data on seagrass local names and essential information for assessing the status of seagrass. Additionally, the consultant will conduct stakeholder validation workshops and consultative meetings to solicit the opinions of community members and stakeholders concerning their knowledge, attitudes, and perceptions regarding seagrass identification and distribution. **Note:** WWF will foresee all finances which will be spent during the stakeholder's validation workshop(s) while the costs for consultative meetings in the field will be managed by consultant(s).

### **5. QUALIFICATIONS AND SKILLS**

The ideal candidate or team for this position should possess the following qualifications and skills:

- (i) A minimum of an advanced degree in a seagrass-related field of study, such as seagrass conservation, management, ecology, mapping, and/or Marine/Aquatic sciences;

- (ii) Additional expertise in remote sensing within environmental studies will be considered a valuable advantage;
- (iii) If applying as a team or firm, the team leader must have at least 5 years of professional experience in seagrass assessment, preferably with specific expertise in seagrass ecosystems in designated areas;
- (iv) Experience in working on sea grass resources/ habitat in Tanzania, SWIO/WIO region – scientifically and practically;
- (v) Demonstrated experience in working with coastal communities, showing an understanding of community engagement and collaboration;
- (vi) Proven track record of successfully completing similar assignments related to seagrass assessment or conservation and if possible, publications;
- (vii) Fluent in both English and Kiswahili languages with advanced report writing skills to effectively communicate findings and results.
- (viii) Proficiency in computer tools, MS Word, Excel, PowerPoint, knowledge in remote sensing, use of GPS, and other relevant applications, for data analysis, reporting, and presentation purposes.

## 6. CONSULTANCY DURATION

The consultancy is assigned for **120 days** working period spread over the period of **four months** from the date of contract signing to ensure all scientific analysis and interpretation of data and information gathered.

## 7. APPLICATION PROCEDURE

Guidelines for submission

Interested applicants are required to submit the following:

- (i) **Technical proposal** comprising the following: add the annex for indicators to be monitored.
  - Personal CV(s) and three professional references and/or evidence of relevant experience and mentioned competencies
  - The proposal containing the methodology based on the indication provided by this ToR (6-7-page max)
  - Work Plan/activity plan
  - Team composition and
  - All direct and indirect conflict of interest should be declared
- (ii) **Financial proposal** indicating the all-inclusive contract value in currency (quotes should be in TZS for local applicants), supported by the respective cost breakdown for professional fees, hiring vehicle/equipment, the institutional fee (when relevant), and reimbursables.

Interested applicants should direct their **soft copy of application** to the procurement: e-mail at [procurement@wwftz.org](mailto:procurement@wwftz.org) and or hard copy applications to the address indicated above. Deadline for submission is **20<sup>th</sup> November, 2023**

Interested applicants may get the detailed Terms of Reference (ToR) and specifications through the following websites: [https://www.wwf.or.tz/jobs\\_and\\_opportunities/jobs/](https://www.wwf.or.tz/jobs_and_opportunities/jobs/)

WWF TCO reserves the right to accept or reject any or all the applications without assigning any reason thereof. Late application shall not be accepted for evaluation irrespective of the circumstance.

WWF has a principle of zero-tolerance to fraud and corruption, if you encounter such incident, report by sending an email to [fcci@wwftz.org](mailto:fcci@wwftz.org)