



Jumuiko la Maliasili Tanzania
Tanzania Natural Resource Forum

Call for Proposals Terms of Reference (ToR)

Provision of consultancy services to conduct ecological baseline survey and establish a system for Wildlife ecological assessment and monitoring in Enduimet, Ikona and Makao Wildlife Management Areas (WMAs).

Position: Consultant

Start Date: 20th January, 2021

End Dates: 60 working days spread over 3 months with 20 days in each of 3 WMAs

Assessment Area: Northern Tanzania Enduimet, Ikona and Makao WMAs.

Reporting To: TNRF Executive Director through BMZ Project Lead at TNRF

Project Name: Protection of key ecosystems, increased resilience and adaptation for their sustainable use by local communities in south-east Africa

Reference Number: Project ID P5534

1. Background and Project Overview

1.1 Background

Enduimet, Ikona and Makao Wildlife Management Areas have unique ecosystems of outstanding importance for the protection of global biodiversity. There are still large continuous natural areas with viable populations of numerous endangered species. At the same time, the people living in

these areas are particularly dependent on the conservation of these ecosystems, their biodiversity and services. Nature tourism is overall one of the most important economic sectors in Tanzania. However, the ecosystems mentioned above are increasingly affected by the impacts of climate change, such as more frequent droughts and sporadic heavy rainfall, which are exacerbated by increasingly unsustainable forms and intensities of use, such as overgrazing, a growing population and an increased economic development pressure. Numerous conservancies and their functions are threatened by this. There is therefore both an urgent need for adaptation and diversification of income flows and a short and medium-term need for support to maintain and strengthen the proven community structures for the future and to adapt them to the rapidly changing climate and economic conditions.

The Tanzania Natural Resource Forum (TNRF) is a network organization registered in 2006 as a Non-Governmental Organization (NGO), with the aim of promoting the improvement of natural resource governance to achieve more sustainable rural livelihoods and better conservation outcomes. TNRF works for improved natural resources governance by helping to bridge the gap between:

- People's local natural resource management needs and practices, and
- National natural resource management priorities, policies, laws and programs

TNRF has received funding from the Federal Ministry for Economic Cooperation and Development (BMZ) through World Wide Fund for Nature (WWF) Tanzania Country Office to implement some of activities within Climate change adaptation support for community managed areas (CBNRM) project. TNRF is therefore intend to use part of the fund to finance this consultancy.

1. 2 Project Overview

The project is implemented with WWF Tanzania and Tanzania Natural Resource Forum (TNRF) as a partner. The main objective of project is addressed by the following four concrete project outputs and corresponding packages of measures focusing on the Enduimet, Ikona, Makao and

Lake Natron Wildlife Management Areas and two additional project sites in Mwanga and Same districts:

- a) Capacities of community conservation and management areas are strengthened to effectively improve their climate resilience and adaptation and effective protection of their biodiversity and ecosystems;
- b) Capacities of communities for implementing climate-smart approaches are improved and household incomes diversified leads to improved livelihoods and well-being of the communities in the selected community conservation areas;
- c) Capacities for improved forest, fire and pasture land management improves the climate resilience of key ecological and economic habitats enhanced; and
- d) Environmental and social safeguards (ESS) in relation to climate adaptation and project activities established.

TNRF is looking consultants to submit proposals to conduct ecological baseline survey and establish a system for Wildlife ecological assessment wildlife and habitat assessment / ecological baseline survey in Enduimet, Ikona and Makao Wildlife Management Areas. This consultancy is addressing output(c).

2. Objective of consultancy, Scope of Work, Responsibilities and Description of the Proposed Analytical Work

2.1. Objective of the assignment

The objective of this consultancy is to conduct ecological baseline survey and create a system for the assessment, evaluation and modelling of the status of natural resources including wildlife densities, habitat types, river systems in Enduimet, Ikona and Makao WMAs.

2.2. Specific objectives

The following are specific objectives of consultancy:

- a) Assessment, evaluation and modelling of the status of wildlife densities

Wildlife managers want to understand and monitor wildlife density at any given time and space for wildlife management. Wildlife density can be good indicator of wildlife management as it is related to basic wildlife demographic parameters like births, deaths, immigration and emigration. Due to human activities and climate change, wildlife density in the wildlife management areas is fluctuating and hence there is a need to understand its spatial and temporal status. Consultant is expected to undertake but not limited to the following tasks:

- i. Develop practical wildlife density estimation method and apply the same to determine wildlife densities (baseline) in the respective wildlife management areas;
- ii. Identify which factors are affecting wildlife density and propose what to be done;
- iii. Assess and develop baseline data on the impacts of climate change particularly how increasing temperatures and precipitation distribution patterns are likely to affect wildlife density;
- iv. Map wildlife density in relation to habitat, water resources, communities around the conservation areas; and implication of the same;
- v. From assessment, develop database and monitoring framework to enable game scouts and other stakeholders to best monitor wildlife densities.
- vi. The consultants to support game scouts to operationalize the monitoring framework to monitor wildlife densities

b) Assessment, evaluation and modelling of the status of habitat types

Wildlife habitats are critical factor for ecological integrity and the long-term survival of wildlife in a given ecosystem. Habitats play very important ecological roles by providing shelter, breeding places, dispersal and foraging grounds for a variety of wildlife species. Habitants determine the movement of wildlife from one location to another and hence allowed exchange of the genetic material and wildlife vigor. This consultancy therefore is determining to assess, evaluate and model the status of habitat types to inform sustainable management of wildlife management in the aforesaid areas.

The consultant is expected to undertake but not necessary limited to the following tasks:

- i. Use wildlife habitat Models to understand habitat factors that affect wildlife habitat types. Consultant can use any model such as statistical empirical models, habitat relationship models, simulation models and GIS-based models among others provided is appropriate to the area and can be applied;
 - ii. Assess and develop baseline data on the impacts of climate change particularly how increasing temperatures and precipitation distribution patterns are likely to affect wildlife habitats and species distributions as well as fire regimes, vegetation communities, and river systems; seasonal and permanent and other water sources;
 - iii. Develop baseline data and map of wildlife habitat in relation to water resources, communities around the conservation areas; and implication of the same; and
 - iv. From assessment, develop database and monitoring framework to enable game scouts and other stakeholders to best monitor wildlife habitats.
 - v. The consultants to support game scouts to operationalize the monitoring framework to monitor wildlife habitats
- c) Propose climate change adaptation and mitigation actions to address identified climate change impacts identified in (a) and (b)

Consultant is expected to propose climate change adaptation and mitigation measures including nature-based solutions and increased community education and awareness on climate change impacts and their mitigation and adaptation.

- d) To develop/standardize Management-Oriented Monitoring Systems (MOMS) modules for wildlife and habitat monitoring by WMA management. Consultant will describe and assess current monitoring systems and activities applied/conducted in each WMA and highlight gaps and recommended improvements
 - i. Develop user friendly MOMs or standardize existing monitoring systems to be used by the rangers and WMA staff based on the survey results in three WMAs

- ii. Support rangers and WMA staff in weekly, monthly monitoring wildlife, ecosystem, resource and land use baseline surveys and monitoring using improved community based monitoring system and production of reports(establishment of transects, setting up camera traps, monitoring protocols database creation and updating, mapping of data, analysis and popularization of data/results)
- e)To develop a data base (software) on a detailed analysis of satellite images and secondary data on ecological parameters of survey results.
- i. Develop detailed database and geo reference key ecological information
 - ii. Validate the database with rangers, WMA staff and other project staff and communities
- f) By use of GIS/ Remote sensing system to produce a detailed resource assessment maps for the 3 WMAs
- i. Produce a high quality resource assessment maps
- g)Produce a progress report at each stage and final comprehensive report of the assignment
- i. Produce a draft progress report for each stage of the assignment and one final report

All information gathered in raw and/or processed format are the sole property of the project

3. Qualifications Required

This consultancy is suitable for individuals with qualification in providing analytical research in the field of wildlife ecological, climate change, biodiversity and rangelands assessments.

Academic Qualifications:

- Master's degree in ecology, Natural resource management, Rangeland Management, Wildlife Management, Biodiversity or related fields. PhD is an additional asset.

Years of Experience:

- Minimum 5years of professional experience in ecological and biodiversity assessments and/or related fields at a local and regional level. Experience in providing quality comprehensive analytical reports.

Competencies

- a) Knowledge, understanding, and practical implementation of survey methodology that demonstrates clear cognizance of technical focal points associated with wildlife conservation, most importantly ecological related sectors.
- b) Knowledge and understanding of the current ecology and economic related productive sectors and natural resource governance issues in northern Tanzania.
- c) Proficiency in the use of computer and related software.
- d) Experience in the application of GIS and remote sensing technologies
- e) Experiences and skills in database development and operationalization; and
- f) Experiences and skills in developing and operationalize WMA specific Management Oriented Monitoring System (MOMS).
- g) Good communication skills included proficiency in Kiswahili and English Languages.
- h) Ability to meet deadlines and prioritize multiple tasks.
- i) Strong organizational, coordination and report writing skills.

4. Duration/Timing of the contract

The overall duration of the assignment covered by this ToR is 60 working days spread over 3 months from the date of contract signature to cover all 3 WMAs. Each WMA will have 20 days

5. Deliverables

- An Inception report
- Management-Oriented Monitoring Systems (MOMS)/or standardized monitoring systems for habitat monitoring for each WMA Data base (software) established and operationalized and report on a detailed analysis of satellite images and secondary data on ecological parameters of survey results. GIS maps of the resource assessments in 3 WMAs
- Progress reports at each stage and final comprehensive report of the assignment
- Final comprehensive report of the assignment both in hard and soft copy

- Report indicating the support provided to game scout to monitor wildlife habitats and densities including support rangers and WMA staff in weekly, monthly monitoring wildlife, ecosystem, resource and land use baseline surveys and monitoring using improved community based monitoring system and production of reports

After submission of reports, the Consultant will receive comments from Project Management Team within 7 working days. It is expected from the Consultant to submit an updated report within 7 working days after receiving comments.

6. Submission procedure

Consultants who wish to express interest in undertaking the prescribed assignment are requested to send hard-copies of the following:

i. A technical proposal not exceeding 10 pages (in a sealed envelope clearly marked “Technical Proposal”) containing:

- a. An understanding and interpretation of the TOR.
- b. Methodology to be used in undertaking the assignment.
- c. Time and activity schedule.
- d. Evidence of relevant experience and samples of products related to the assignment.
Curriculum vitae of the lead consultant to undertake the assignment

ii) A financial proposal not exceeding 2 pages (sealed in a separate envelope clearly marked “Financial Proposal”) including:

- a. Consultant’s daily rates/ professional fees in Tanzania Shillings.
- b. Any other related costs to be incurred by the consultant while undertaking the assignment. The two envelopes will then be sealed in a third one clearly marked: “Proposal to conduct wildlife and habitat assessment / ecological baseline survey in Enduimet, Ikona and Makao Wildlife Management Areas” Kindly include a return address on all envelopes not later than 13 January 2021.

Procurement / Tender Committee

Tanzania Natural Resource Forum

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Kindly include a return address on all envelopes **not later than 13 January 2021.**