Terms of Reference for guidance on project development document of mangrove carbon forests within the Zambezi Delta in Mozambique

1. Background

Mozambique has a coastline of 2,700 Km and nine species of mangroves found along the coast having a mangrove cover of 290,000 ha. Based on recent assessments, 28% of these mangroves occur in the Zambezi delta (Fatoyimbo et al., 2008). The Zambezi delta is sparsely inhabited with few small villages, where agriculture and artisanal fisheries are the main economic activities (Beilfuss et al., 2001).

Mangrove ecosystems are important to communities throughout the Mozambique coastal area. Mangrove forests provide a wide range of services at the local and national levels, including supporting beekeeping, crab farming, coastal protection, mangrove harvesting for construction use, and community-based ecotourism (Barbosa e Bandeira, 2001). In Mozambique mangrove forests are also important culturally and are often used for traditional medicinal needs. Mangroves are also recognized as vital habitat for the prawn industry. Mangrove-dependent fisheries represent 3-4% of Mozambique´s Gross National Product (MICOA, 2012).

The Zambezi Delta is a wetland system of high profound conservation and resource value. The delta has more than 350 000 rural villagers, who depend on the delta's rich natural resources for their livelihood and mangroves play an important role.

The south bank of the Zambezi Delta falls into the larger landscape of Marromeu Complex with an extent area of 11,000 Km^2. The complex includes the Marromeu Special Reserve (Reserva Especial de Marromeu) under the responsibility of Ministry of Tourism, four surrounding hunting concessions (Coutadas 10, 11, 12, and 14), coastal mangrove zone, commercial sugar production yields, lowland subsistence agriculture and grazing lands, the Salone depression (a river corridor that connects the Marromeu Complex to the Zambezi River). The project site lies within the Chinde District and is bounded by Chinde town on the north and the Marromeu Reserve to the south end.

The Zambezi delta mangrove carbon project brings together the full richness of WWF experience in an already declared Ramsar site that is of global importance for its unique biodiversity, nationally important for Mozambique's economy, and locally important as a source of livelihoods for resident communities. The Project development activities have included meeting with the local communities surrounding the project area, implementation of the Management Plan of Marromeu Complex which will result in lowering the pressure on land and forest resources in consultation with the local community and with the monitoring of the Local Governmental Institutions.

1.1. Project Context

The project “Sustainable Financing of the Protected Area System in Mozambique” funded by UNDP GEF is jointly implemented by the Ministry of Tourism, the Gorongosa Restoration Project, and WWF Mozambique. The overall objective of this project is to “Strengthen the overall effectiveness and sustainability of Mozambique’s Protected Area System, including financial sustainability, through working in partnership between public, private, NGO and community stakeholders”.

Under the responsibility of WWF MCO as the main project proponent is the development of a pilot carbon stock project in the mangrove forests of a coastal conservation area. Through the identification of mangrove forests in conservation areas, the Special Reserve of Marromeu within the Zambezi Delta was selected as the pilot area for the geographic scope of this project.

The project main goal is to advance through a depth feasibility analyze a preparation of the Project Description Document (PDD), to cover a mangrove area with about 30.000 ha. The key information needed for the completion of the PDD includes: carbon stocks and greenhouse gases (GHG) reduction, socioeconomic and biodiversity data, baseline information and a Monitoring and Reporting Plan.

2. Project Objective

This project can be summarised in the following objectives:

- Development of a mangrove pilot project in the coastal conservation area of Special Reserve of Marromeu;
- Analyse the existent mangrove carbon methodologies that can be applied in different conservation areas and mangrove forests;
- Support the design of the project document (PDD) following the standards of Voluntary Carbon Standard (VCS) and the Climate, Community and Biodiversity standard (CCB);
- Contribution for a sustainable management of mangrove forests in a conservation area through carbon finance fairly distributed among the conservation area and the rural communities.

3. Project Activities

To implement this pilot project, specific activities are targeted at:

- Conducting pre-feasibility scoping for potential mangrove carbon projects in conservation areas, including identification of project sites and project proponents;
- Preparing Project Idea Note (PIN) or concept for a pilot site to be selected, including:

  - Defining project scope
  - Identification of project area
  - Identification of potential partners
  - Analysis of legal feasibility
  - Initialization of stakeholder engagement
  - Assessment of the project feasibility
- Consulting with other project proponents developing mangrove projects;
- Designing project through in-depth feasibility analysis resulting in preparation of Project Design Document (PDD), including work to:
  - Establishment of a carbon baseline
  - Social and economic assessment of the drivers of deforestation
  - Analysis of financial costs and legal issues in the project
  - Stakeholder consultations
  - Development of project methodology
- Identification of co-benefits provided by mangroves;
- Validation of project by third party auditor and registration of project to comply with CCBA and VCS standards;
- Beginning implementation of community-based mangrove restoration and protection activities, such as training communities in sustainable harvesting of mangroves, the introduction of energy efficient stoves to reduce deforestation and re-planting mangroves;
- Fundraising, including project marketing and communications with donors, to raise sufficient funds for project implementation.

4. Scope of Work

3.1. Specific Tasks for Project Description Document (PDD) guidance

The Project is under development and specific activities are currently been implemented in order to produce the support documentation that should be carefully organized to be accessible for validation. Along the project implementation the objectives of the project were changed and some readjustments were made to have a final document which follows the standards requirements. According to that, is expected that the consultant (s) will undertake the following tasks in the project:

- Check the Kyoto-compliance of the project;

- Carefully analyse the standards which is pretended to validate the project and the currently methodology used to ensure that documented evidence shows conformance for all of the standards criteria, that the project complies with all applicability criteria of the methodology, and that the PDD explains how each step of the methodology has been executed;
- Guidance to select a proper methodology under the VCS/CDM which fits with the methodology used for baseline carbon assessment and quantification of the emission reductions;
- Analyse the type and scope of the required studies to accomplish with the carbon market standards;
- Maintain complete, organized "documented evidence" for key data and assumptions (e.g., agents and drivers of deforestation, bibliographical support for allometric models), as well as a central repository for collecting all supporting material (including scanned copies of printed documentation);
- Review all documents for consistency in arguments, data assumptions, and dates should be agreed upon and applied in compiling GIS data and remote sensing imageries;
- Evaluate all risks, legal considerations, social and environmental impact assessments;
- Evaluate the results of stakeholder consultations and liaison with regulators;
- Evaluate the monitoring strategy for the lifetime of the project;
- Analyse the project proponents and partners roles, responsibilities, and management structure for project implementation, including which activities will be carried out by different implementing entities;
- Preparation of the validation procedure;
- Facilitation of communication with auditors;
- Drafting carbon contracts.

5. Consultancy Tasks

- Prepare a technical and financial work plan for the assessment;
- Collaboration with the WWF Team and inputs in the PDD.

6. Deliverables

- The consultant should review the status of all project baseline information to ensure the compliance of the requirements of an existing VCS standard and/or revise the project and propose a new methodology for VCS as needed the project;
- Title the reference methodology and the applicability conditions and justifications for the module and the compliance of the framework modules namely:
    - 1. Carbon pools; 2. Leakage pools; 3. Monitoring pools; 4. List the tools/modules used
- Identify the Green House Gases (GHG) sources included in the project boundary and in the leakage project area:
    - Calculate the carbon stocks and the changes per stratum
    - Produce a table of calculations of total carbon stocks areas (CBSL) and polls up to time in the project area or in the leakage area
    - Analyse the project emissions within the project area and in the leakage area (deforestation, degradations, GHG emissions)
    - Summary of all data parameters and equations used in the calculations used in the project development
    - Propose a document with a monitoring plan including:
        - Deforestation and project emissions
        - Quality assurance
        - Update forest carbon stocks estimates
    - Report the environmental impact of the project

The consultant should give assistance for the compilation of PDD chapters and guidance for the standards compliance by developing a review document with the available data in the project. The document produced must be written in the VCS format and submitted in two editable copies for WWF (Word and PDF). The result of this work will be presented in a meeting in WWF MCO.

All studies, books, scientific articles and data acquired during the consultancy should be referenced in the bibliographic list of the final report and an electronic copy of these where available should be submitted to WWF.

7. Consultant Profile

The consultant should have the following profile:

- Degree in Forestry, Socio-economic, Science and Environment. Knowledge and experience working in coastal ecosystems, carbon stocks, GIS, socio-economic assessments;
- Experience with payment ecosystems services and sustainable development initiatives;
- Experience/ knowlegment with the PDD and REDD programs;
- Experience approved with the Verified Carbon Standard (VCS) and Climate, Community and Biodiversity (CCB) standards;
- A strong communication and written skills;
- Knowledge in Portuguese and English language is a requirement;
- Availability to work in Mozambique with the PDD Team of WWF.

8. Consultant (s) Relationship

The consultant (s) will work closely and on a regular basis with project implementation manager based in Maputo.

The consultant (s) should interact with governmental institutions, non-governmental organizations and the main local stakeholders involved in the project implementation.

9. Proposals Submissions

Additional information including the Terms of Reference can be assessed on the WWF webpage: www.wwf.org.mz.

A technical and financial proposal giving details on the available expertise and workplan timeline to achieve the deliverable should be submitted to WWF MCO at Kenneth Kaunda Avenue nº 107 until 24th March 2015.