

Terms of reference (ToRs) for the assessment of livelihood-ecosystem interdependencies for integrated management of Point Calimere Ramsar site

Assessment of livelihood-ecosystem interdependencies for integrated management of Point Calimere Ramsar site	Project number/ cost centre: 16.9020.5.001.00
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0. List of abbreviations

AVB	General Terms and Conditions of Contract (AVB) for supplying services and work 2019
ToR	Terms of reference
PCWC	Point Calimere Wetland Complex
NPCA	National Plan for Conservation of Aquatic Ecosystems
MoEFCC	Ministry of Environment, Forest and Climate Change
ESZ	Eco-sensitive zone

1. Context

1.1 Project Background

Wetlands exist as transitional ecosystems at land and water interface which are represented by various types including lakes, marshes, reservoirs, mangroves, lagoons, estuaries etc. As highly productive ecosystems, wetlands are vital for hydrological cycle and support rich biological diversity. Globally, wetlands are threatened by reclamation and degradation through drainage and landfill, pollution, hydrological alteration, over-exploitation, and climate change resulting in loss of biodiversity and disruption in ecosystem benefits to the society.

Wetlands in India are integral to biodiversity conservation, water and food security, and climate protection. MoEFCC, in partnership with GIZ, is implementing a Technical Cooperation project “Wetlands management for biodiversity and climate protection” with funding support from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI). The goal of the project is to strengthen the institutional framework and enhance capacities for an ecosystem-based integrated management of wetlands of international importance (Ramsar sites) in India.

The project is implemented in close cooperation with the NPCA of the MoEFCC with an overall objective to establish an integrated management approach at four Ramsar sites (namely, Pong, Renuka, Bhitarkanika and Point Calimere). In order to facilitate project implementation, Wetland Research and Training Centre, Chilika Development Authority (CDA) has been identified as a resource centre in partnership with the respective State Wetlands Authorities and site level management institutions. Wetlands International South Asia (WISA) is the technical partner in project implementation.

Three main output areas define the implementation approach of the project:

- Integrated management planning for 4 pilot Ramsar sites based on biodiversity, ecosystem services and climate change risks.
- Capacity development of national, state and site level stakeholders for integrated wetland management.
- Development of a wetland monitoring system, including an instrument to track management effectiveness.

1.2 Context of the assignment

Wetland ecosystem services (the benefits people derive from wetlands) form an integral part of the livelihood strategy of wetland-dependent communities. Wetland dependent communities are typically heavily dependent on the wetland resources present for their livelihoods, in terms of fisheries, irrigation water, and gathering of other wetland products. Changes in the quantity or quality of those wetland resources or in people’s access to them may affect people’s livelihoods. Conversely, livelihood strategies of communities living in and around wetlands may also influence a wetland’s ecological character. Assessment of wetland-dependent livelihoods would help in involving local people in conservation processes and promoting sustainable use of wetland resources, at the same time improving and securing local livelihood.

1.3 Objectives and Scope of the Assignment

Point Calimere Ramsar site covering an area of 38,500 ha comprises of Point Calimere Wildlife Sanctuary (2147 ha), Panchanadikulam Wetland (8097 ha), Thalainayar Reserved Forest

(1236 ha), Muthupet Mangroves (11900 ha) and unsurveyed salt swamp (15120 ha).¹ Except the Thalainayar Reserved Forest, the remaining constituents are part of the Great Vedaranyam Swamp. The Ramsar Site is a mix of salt swamps, mangroves, backwaters, mudflats, grasslands and Tropical Dry Evergreen Forest. It supports nearly 257 species of birds, 119 of them waterbirds, including vulnerable species. The site serves as the breeding ground for many commercially important species of fish, as well as for prawns and crabs. A large number of fishermen, agriculturalists and salt manufacturers are dependent upon the wetland for their livelihood. The spread of *Prosopis*, salinisation of groundwater and changes in inflow of freshwater are all seen as threat to the wetland as well as the livelihoods supported by the wetland.

The aim of the assignment is to understand the linkage of human well-being to the ecological character of Point Calimere Ramsar site. Point Calimere Ramsar site provides a range of ecosystem services on which a large number of livelihoods are dependent - like fisheries, agriculture, salt production, aquaculture, plantation, and horticulture etc. The livelihood in this region is under tremendous pressure with the dams constructed across the rivers and streams, and water abstraction structures, controlling water availability in the region. Further, salinisation in these areas as a result of improper management of canal irrigation, aquaculture and salt production activities and seawater intrusion through backwater also impacts the livelihoods. The coastal communities in this region are also vulnerable to disasters including cyclones and drought which have become more frequent over the past few years. Overall, these factors impact the ecosystem services and the food security and income of the communities in the region.

The main objective of the assignment is ‘assessment of ecosystem services of Point Calimere Ramsar site and people’s interdependence on them, and to recommend management measures for sustaining the wetland-dependent livelihoods and maintaining ecological character of Point Calimere Ramsar site’. (The wetland ecological character can be defined as the "combination of ecosystem components, processes and benefits/services"). The present assignment should inventory the general socio-economic condition of the wetland-dependent communities. It should investigate what, how, when, why and by whom wetland resources are used, and identify the implications of this use on wetland ecological character and conservation status and the status of the local economy and livelihoods. The assessment would help in understanding the degree to which Point Calimere Ramsar site contributes to people's livelihoods and therefore help in decision making which minimizes the negative impacts or enhances the benefits that Point Calimere Ramsar site has for the communities, such as contribution to household income.

Note: The use of the word ‘wetland’ in the section 2 of ‘Tasks to be performed by the contractor’, refers to Point Calimere Ramsar site.

¹ <https://www.forests.tn.gov.in/pages/view/Ramsar-Site-Of-TN>

2. Tasks to be performed by the contractor

The contractor is responsible for providing the following services:

2.1 Assessment of ecosystem services provided by Point Calimere Ramsar site

- Identification and prioritisation of ecosystem services (*actual and potential*) delivered by the wetland.
- Mapping the spatial distribution and flow of ecosystem services (spatial connectivity between wetland ecosystem and beneficiaries). This should be done at different scales - from local (living/working immediately around the wetland), and regional (those upstream of the wetland or in the wider region).

2.2 Socio-economic profile of communities dependent on Point Calimere Ramsar site

- Define the scope for carrying out the socio-economic assessment including both on- and off-site beneficiaries, considering that some communities which receive these benefits or impact the wetland may vary between seasons or over time.
- Document the existing socio-economic status of the wetland-dependent communities in relation to demography, income, education, occupation, and enterprise, common property resource-based activities, etc. This should also include documentation of population growth and migration patterns in wetland dependent communities.
- Documentation of community infrastructure around wetland including roads, culverts, drainage structures, water supply systems, earthen dams, ponds, borewells, taps, waste and sewage disposal, market places, etc.
- Documentation of land ownership, rights and privileges pertaining to the wetland.
- Study of beliefs, knowledge and cultural practices (including local festivals and traditional rituals) of the local communities associated with wetland use and management.

2.3 Assessment of governance and institutional arrangements

- Assessment of local institutions of governance, community-based institutions (formal/informal) which affect wetland-based livelihoods with emphasis on the factors that inhibit or facilitate livelihood choices and options. This should include identification of Associations/Societies (Farmers, Aquaculture, Salt producers, etc.), at village, block and district level, and state level, their status and mechanism of operation. Further, community's needs for livelihood improvement through these institutions needs to be assessed.
- Overview of stakeholders' positions, interests, needs and influence (including Private companies like Chemplast, GHCL).
- Assessment of impact of policies, laws and rules (including ESZ notification, CRZ notification, Fisheries regulation, Wildlife Protection Act, etc.) on the wetland dependent livelihoods.

2.4 Livelihood dependence on Point Calimere Ramsar site

- Assessment of wetland resources used for subsistence and livelihood generation including their quantification (yield), spatial distribution and species composition (salt production, agriculture, aquaculture, fisheries, horticulture, plantation, brick making, etc.).
- Assessment of resource extraction techniques and practices, and methods of processing, storage and use (such as type of boats, nets, etc.).
- Documentation of livelihood activities which require permissions/licenses, the costs involved, and relevant institutions. Analyse the existing regulations and restrictions to wetland use and the extent of compliance.
- Assessment of seasonal and temporal trends in ecosystem services.
- Assessment of competing use of wetland ecosystem services.
- Assessment of the impact of natural disasters such as drought and cyclone on local communities and wetland dependent livelihoods.
- Analysis of existing markets for wetland resources including fisheries, salt, fuelwood, etc.

2.5 Assessment of trends in livelihood dependence on Point Calimere Ramsar site (20-30 years)

- Assessment of spatial and temporal trends in wetland resource availability and resource use including change in cropping and fishing patterns, livestock, aquaculture practices, salt production, tourism and livelihood diversification, water availability and extraction, etc.

2.6 Impact of livelihood activities on the ecological character Point Calimere Ramsar site

- Documentation and analysis of impact of major livelihood activities (including impact of agriculture, aquaculture, salt production) and resource use on the wetland.
- Assessment of impact of community infrastructure (including sewage discharge, water abstraction structures) on the wetland.
- Assessment of impact of changes in ecological character of the wetland on wetland dependent livelihoods.
- Identification and prioritisation of key ecological characteristics (including wetland components, processes and services) of the wetland for sustaining ecosystem services and wetland dependent livelihoods.

2.7 Drivers of change impacting wetland-dependent livelihoods

- Identification, analyses and prioritisation of direct and indirect drivers impacting wetland ecosystem services and wetland-dependent livelihoods.

2.8 Recommendations for integrated management of Point Calimere Ramsar site

On the basis of the above assessments suggest –

- Measures to manage drivers of change to sustain wetland-dependent livelihoods and maintain wetland ecological character.

- Measures for improving the existing wetland dependent livelihoods through sustainable use of wetland resources focusing on agriculture, horticulture, fisheries, salt production, tourism, plantation and other sectors.
- Strategies for improving synergies and minimising conflicts of wetland use for livelihood.
- Institutional arrangement for sustaining wetland-dependent livelihoods and maintaining wetland ecological character.
- Recommendations for multi-stakeholder engagement focussed on improving synergies and minimising conflicts amongst stakeholders.
- Identification of skills/capacities needed for improving wetland-dependent livelihoods.
- Based on global good practices propose strategies for sustainable livelihoods at Point Calimere Ramsar site.

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at particular locations:

Milestone	Deadline (from the signing of contract)
Submission of inception report and presentation (including compilation of literature review, field study design and methods, report outline, workplan and timeframe for execution)	3 weeks
Submission and presentation of pilot field results to finalise the methodology	6 weeks
Submission and presentation of interim report including preliminary assessment results	14 weeks
Stakeholder consultation workshop presenting assessment findings and recommendations	20 weeks
Submission and presentation of draft final report including incorporation of suggestions from consultations	23 weeks
Submission of final report after incorporation of suggestions	26 weeks

Report Structure

The following report structure is suggested for the assignment.

- i. Executive summary highlighting the important findings of the assessment and key recommendations.
- ii. Introduction including a brief review of existing literature describing livelihood-wetland interlinkage in Point Calimere Ramsar site.
- iii. Methodology followed for carrying out the assessment including site maps
- iv. Analysis and Results

- Mapping and description of ecosystem services provided by Point Calimere Ramsar site
 - Socio-economic profile of communities dependent on Point Calimere Ramsar site.
 - Governance and institutional framework impacting wetland-dependent livelihoods.
 - Status and trends of livelihood dependence on Point Calimere Ramsar site.
 - Impact of livelihoods on ecological character of Point Calimere Ramsar site.
 - Drivers of change impacting wetland ecosystem services and wetland-dependent livelihoods.
 - Trade-offs in wetland utilisation.
 - Key ecological characteristics and functions necessary for sustaining the ES and livelihoods.
 - Recommendations for sustaining wetland dependent livelihoods and maintaining wetland ecological character.
- v. Conclusions
- vi. References
- vii. Annex

The Contractor shall report to the Team Leader of Wetlands Project and work in close cooperation with Wildlife Warden, Nagapattinam and DFO, Thiruvarur, Tamil Nadu Forest Department. GIZ representative may also join the contractor for field visits. The field work schedule shall be coordinated with Tamil Nadu Forest Department and GIZ.

The deliverables as per the TOR shall be submitted to GIZ within the timelines specified in this document.

Period of assignment: From 1 December 2019 until 31 May 2020.

3. Concept

In the bid, the bidder is required to show how the objectives defined in Chapter 2 are to be achieved, if applicable under consideration of further specific method-related requirements (technical-methodological concept). In addition, the bidder must describe the project management system for service provision.

Technical-methodological concept

Strategy: The bidder is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1). Following this, the bidder presents and justifies the strategy with which it intends to provide the services for which it is responsible (see Chapter 2).

The bidder is required to present the actors relevant for the services for which it is responsible and describe the **cooperation** with them.

The bidder is required to present and explain its approach to **steering** the measures with the project partners and its contribution to the results-based monitoring system.

The bidder is required to describe the key **processes** for the services for which it is responsible and create a schedule that describes how the services according to Chapter 2 are to be provided. In particular, the bidder is required to describe the necessary work steps and, if applicable, take account of the milestones and contributions of other actors in accordance with Chapter 2.

The bidder is required to describe its contribution to knowledge management for the partner and GIZ and promote scaling-up effects (**learning and innovation**).

Other specific requirements

The methodology for the assignment is proposed to include field-based assessments in addition to review and analyses of data from secondary sources and literature.

The contractor shall work in close cooperation with the site manager (Tamil Nadu Forest Department). The assignment execution should follow the feedback mechanism with regular discussion and engagement of the contractor with GIZ and Tamil Nadu Forest Department. For this purpose, the contractor would be available for discussions and meetings in Delhi/Nagapattinam or over skype as and when required.

Project management of the contractor

The bidder is required to explain its approach for coordination with the GIZ project.

- The contractor is responsible for selecting, preparing, training and steering the experts (international and national, short and long term) assigned to perform the advisory tasks.
- The contractor makes available equipment and supplies (consumables) and assumes the associated operating and administrative costs.
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ.

The contractor reports regularly to GIZ in accordance with the AVB of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH from 2019

In derogation from GIZ AVB, the contractor makes contributions to reports to GIZ's commissioning party instead of submitting its own reports.

The bidder is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the bid; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

Eligibility Criteria for firms

The qualifying criteria for the firms/institutions/organisations applying for this is given as follows:

- Should be registered in India;
- Should have annual turnover of at least Euro 50,000;
- Should have present staff strength of at least 5 persons;
- Should have implemented reference project with a minimum value commission of Euro 5,000;

- Should have implemented at least one reference project in the field of socio-economic and institutional assessment in rural India;
- Should have implemented at least one reference project in Tamil Nadu in the last three years
- Should have experience of wetland-dependent livelihood assessment
- Should have more than 5 years of experience in socio-economic and institutional assessment covering multiple villages
- Should have experience of working on conservation and sustainable use of coastal biodiversity
- Should have experience of implementing assignments with multi-disciplinary teams of experts
- Should have 5 years' experience in implementing assignments in Tamil Nadu, especially along eastern coast
- Experience in implementing development projects
- Sub-contracting the assignment or its parts to other agencies is not permitted.

Technical backstopping

The bidder is required to describe its backstopping concept. The following services are part of the standard backstopping package, which (like ancillary personnel costs) must be factored into the fee schedules of the staff listed in the bid in accordance with section 5.4 of the AVB:

- Service-delivery control
- Managing adaptations to changing conditions
- Ensuring the flow of information between GIZ and field staff
- Contractor's responsibility for seconded personnel
- Process-oriented technical-conceptual steering of the consultancy inputs
- Securing the administrative conclusion of the project
- Ensuring compliance with reporting requirements
- Providing specialist support for the on-site team by staff at company headquarters
- Sharing the lessons learned by the contractor and leveraging the value of lessons learned on site

4. Personnel concept

The bidder is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 7), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points.

Team leader/Technical Expert 1 (Social scientist)

Tasks of the team leader

- Overall responsibility for the advisory packages of the contractor (quality and deadlines).
- Coordinating and ensuring communication with GIZ, partners and others involved in the project.
- Responsible for development of methodology and execution of the assignment.
- Responsible for regular reporting in accordance with the deadlines.
- Personnel management, as well as planning and steering assignment and supporting the pool of experts.

Qualifications of the team leader/Expert 1

- Education/training (2.1.1): University qualification (Master's)/Ph.D. in Social Sciences or any other related field from a reputed Indian / International institute
- Language (2.1.2): Good business language skills in English and Tamil.
- General professional experience (2.1.3): 7-10 years of professional experience in the rural development and livelihood sector;
- Specific professional experience (2.1.4): 3 years' experience in topics of wetlands and its linkages to livelihoods; and well-versed with wetlands and ecosystem services concepts.
- Leadership/management experience (2.1.5): 5 years of experience of managing similar assignments.
- Regional experience (2.1.6): 5 years of experience in projects in Tamil Nadu

Technical Expert 2 (Social scientist)

Tasks of Expert 2

- Develop suitable methodology for the assignment and assist the Team Leader.
- Conduct and oversee field assessments including PRAs, focus group discussions, stakeholder assessment and key informant interviews and prepare maps.
- Data analysis
- Report Preparation

Qualifications of expert 2

- Education/training (2.2.1): Master's degree in Social Sciences/rural management or any other related field
- Language (2.2.2): English and Tamil
- General professional experience (2.2.3): At least 5 years of experience in working with rural communities, livelihood sector
- Specific professional experience (2.2.4): Well-versed with PRA exercises and stakeholder assessments
- Regional experience (2.2.6): 3 years of experience in Tamil Nadu

Technical Expert 3 (Ecologist)

Tasks of expert 3

- Conduct and oversee field assessments.
- Data compilation and analysis
- Report Preparation

Qualifications of Expert 3

- Education/training (2.2.1): Master's degree in ecology or socio-ecology or any other related field
- Language (2.2.2): English and Tamil
- General professional experience (2.2.3): 3 years of experience in conducting socio-ecological assessment or ecological assessment and working with wetland dependent communities
- Specific professional experience (2.2.4): Well-versed with wetland ecology and wetland dependent livelihoods
- Regional experience (2.2.6): 3 years of experience of working in Tamil Nadu

Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

Short-term expert pool with minimum 2, maximum 4 members

Tasks of the short-term expert pool

- Conducting household surveys, PRA exercises, focus group discussions and key informant interviews
- Data compilation and analysis

Qualifications of the short-term expert pool

- Education/training (2.6.1): Experts with Bachelor's/Master's in Social Sciences and one expert with Master's in Remote sensing and GIS or any other related field.
- Language (2.6.2): Good language skills in Tamil required for all technical executives
- General professional experience (2.6.3): Experts with at least 2-3 years of experience in the field data collection, documentation, social mobilisation and conducting focus group discussions and interviews and data entry
- Specific professional experience (2.6.4): Experts with at least 2 years of experience in GIS-based mapping working with Panchayats, working with community-based organisations etc.
- Regional experience (2.6.5): Experts with at least 2 years of experience in Tamil Nadu (region)
- Development Cooperation (DC) experience (2.6.6): NONE
- Other (2.6.7): NONE

The bidder must provide a clear overview of all proposed short-term experts and their individual qualifications.

5. Costing requirements

Assignment of personnel

Team Leader: Up to 45 expert days

Technical Expert 2 & 3: Up to 90 expert days

Expert pool including field investigators: Up to 150 days

Travel

The bidder is required to calculate the travel by the specified experts and the experts it has proposed based on the places of performance stipulated in Chapter 2 and list the expenses separately by daily allowance, accommodation expenses, flight costs and other travel expenses.

Workshops, training

The contractor implements the stakeholder meetings and workshops at Tamil Nadu and/or New Delhi in consultation with GIZ.

6. Inputs of GIZ or other actors

GIZ and Tamil Nadu Forest Department are expected to make the following available:

- Necessary communication to government department to facilitate the tasks outlined in the project
- Conceptual inputs as and when needed

7. Requirements on the format of the bid

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) is to be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). It must be legible (font size 11 or larger) and clearly formulated. The bid is drawn up in English (language).

The core proposal/bid shall not exceed 30 pages (excluding CVs, Annexures and details of reference projects).

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format specified in the terms and conditions for application. The individual CV of each expert shall not exceed 2 pages. The CVs must clearly show the position and job the proposed person held in the reference project and for how long. The CVs shall be submitted in English (language).

If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment.

As the contract to be concluded is a contract for works, please offer a fixed lump sum price that covers all applicable costs (fees, travel expenses etc.). The price bid will be evaluated based on the specified lump sum price. For our internal costing and any further commissions, please also provide the daily rate which the prices are based on. A breakdown of days is not required.