

Unleashing the Blue Economy of the Caribbean Project

GRENADA TERMS OF REFERENCE FOR

AN INDIVIDUAL CONSULTANT TO UNDERTAKE STUDY ON THE TECHNICAL MANAGEMENT MEASURES TO REDUCE THE CAPTURE OF JUVENILES IN THE BEACHSEINE FISHERY FOR COASTAL / INSHORE PELAGIC SPECIES

1. PROJECT BACKGROUND

The Government of the State of Grenada in collaboration with the Governments of St. Lucia and St. Vincent and the Grenadines, along with the Organization of the Eastern Caribbean (OECS) Commission is undertaking implementation of the ‘Unleashing the Blue Economy of the Caribbean (UBEC) Project’ through a hybrid funding facility. This Project will be implemented as a Series of Projects (SOPs) over a fifteen-year period (with each project having a five-year life cycle), with participation of countries based on readiness. The Project Development Objective (PDO) is to strengthen the enabling environment for the blue economy, economic recovery and resilience of selected coastal assets in participating countries and within the subregion. The PDO serves as an overall framework for strengthening the management and resilience of marine and coastal assets to stimulate select OECS economies at the regional, national and community levels.

The first phase of the SOP is currently in implementation (2022 – 2028) and comprises of four Components across three key sectors - tourism, fisheries and waste management sectors in the three participating countries and at the regional level through the OECS Commission. In Grenada, the Project is implemented by the Ministry of Mobilisation, Implementation and Transformation in partnership with the three key sectors.

Component 1: Strengthening Governance, Policies and Capacity Building for Key Productive Sectors

Component 2 - Scale Up Access to Finance and Infrastructure Investments in The Blue Economy

Component 3: Contingent Emergency Response Component (CERC)

Component 4 - Project Management, Communication and Regional Coordination

2. BEACH SEINE BACKGROUND

The big eye scad (*Selar crumenophthalmus*) fishery is a critical component of Grenada's blue economy, providing essential livelihood, nutrition and food security for local communities.

Furthermore, it serves as a fundamental input for the tuna industry as a primary baitfish. Concerns have been raised by fisheries managers and scientists regarding the sustainability of current fishing practices, specifically the use of small mesh sizes in seine nets.

Preliminary evidence suggests these practices may lead to the capture of juvenile fish, potentially resulting in the growth of overfishing, stock depletion and unacceptable levels of bycatch of non-target species. This threatens the long-term viability of the fishery, marine ecosystem health, and the economic resilience of dependent communities and industries.

To address these concerns, the Ministry of Blue Economy and Marine Affairs requires the services of a qualified consultant to conduct a comprehensive evaluation of the sustainability of current seine net fishing practices . This evaluation will determine the feasibility, potential impacts and optimal pathway for implementing technical measures to ensure the ecological and socioeconomic sustainability of the big eye scad fishery. This consultancy falls under Component 1.2 of the UBEC Project.

3. OBJECTIVES OF THE ASSIGNMENT

The primary objective of this assignment is to provide the Ministry of Blue Economy and Marine Affairs with an evidence-based, stakeholder-informed evaluation, findings and recommendations for introducing additional technical measures into the big eye scad seine net fishery to reduce the capture of juveniles.

The specific objectives are to:

- a. Evaluate the current status of the fishery, including biological, technical, and socioeconomic aspects.
- b. Assess the potential impacts, both positive and negative, of introducing technical management measures to reduce the capture of juvenile fish on fish stocks, bycatch, and stakeholder livelihoods.
- c. Determine scientifically sound and socially acceptable technical management measures that could be used to reduce the capture of juveniles in the seine fishery.
- d. Develop a practical and phased implementation strategy, including a monitoring and compliance framework.
- e. Propose an education and outreach program to facilitate stakeholder buy-in and successful adoption.

4. SCOPE OF WORK

The Consultant(s) will be responsible for the following activities:

4.1 Desk Review and Baseline Analysis:

- Conduct a comprehensive literature review of big eye scad biology (e.g., size at maturity, growth rates), seine net gear technology, and selectivity studies.

- Analyze regional and international best practices for introducing technical measures to reduce the capture of juveniles in small-scale beach seine fisheries.
- Review existing Grenadian national fisheries policies, legislation, and regulatory frameworks.

4.2 Field Evaluation and Data Collection:

- Design robust data collection methodologies and tools (e.g., structured questionnaires, focus group discussion guides).
- Design and implement onboard fish-sampling at 3–4 priority landing sites to assess catch-frequency distributions and quantify the proportion of juveniles in beach-seine catches. The consultant shall design and conduct a representative survey of approximately 100 fishermen and key stakeholders to ensure comprehensive geographic coverage across the tri-island state. Data collection must be strategically carried out at major landing sites, including but not limited to: Grand Anse Beach and Melville Street in the southwest; La Sagesse in the southeast; and the eastern, northern and western communities of Grenville, Sauteurs, Gouyave, Victoria and Duquesne on the mainland. The scope of the survey must be extended to include the dependent islands of Carriacou and Petite Martinique as well as Isle De Rhond to ensure the findings are representative of the entire national fishery. The consultant is responsible for developing a stratified sampling strategy to ensure participants are proportionally and randomly selected from these locations.
- Collect quantitative data on current catch rates (CPUE), mesh sizes (through physical verification), fishing effort, and income levels.
- Facilitate Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) with fishers, boat owners, processors, tuna industry representatives, and fisheries officers to gather qualitative data on perceptions, potential impacts, and acceptability of new regulations.

4.3 Data Analysis and Impact Assessment:

- Analyze quantitative data using appropriate statistical methods to establish baselines and model potential outcomes.
- Perform a thematic analysis of qualitative data to identify key concerns, suggestions, and barriers to change.
- Conduct a cost-benefit analysis or a multi-criteria analysis of different technical measure scenarios.
- Assess the potential impacts on the tuna industry's bait supply chain.

4.4 Development of Recommendations and Final Reporting:

- Synthesize findings into a clear set of conclusions.
- Provide a justified recommendation for new technical fishery measures to manage the fishery.
- Draft a detailed implementation plan, including a phased approach, regulatory amendments, and a Monitoring, Control, and Surveillance (MCS) framework.

- Design a comprehensive stakeholder communication and education strategy.

5. METHODOLOGY

The consultant shall employ a mixed-methods approach, combining quantitative and qualitative techniques to ensure findings are both statistically sound and contextually rich. The methodology must be participatory, ensuring stakeholder engagement throughout the process. The proposed methodology must be detailed in the consultant's technical proposal and include:

- Sampling strategy and justification for sample size.
- Data collection tools (to be submitted for approval).
- Data analysis techniques.
- A robust risk mitigation strategy for data collection and community engagement.
- Ethical considerations for working with human subjects.

6. DELIVERABLES

The consultant will submit the following deliverables in English:

- Inception Report:** Within one month of contract signing, detailing the refined methodology, work plan, and finalized data collection tools.
- Draft Literature Review and Baseline Report:** By the end of third month.
- Draft Final Evaluation Report:** A comprehensive report for review by the Ministry, submitted by the end of the sixth month. The Report shall include all data analysis, findings and preliminary recommendations.
- Stakeholder Validation Workshop:** To present draft findings and gather feedback by the end of the seventh month.
- Final Evaluation Report:** Incorporating all feedback submitted within two weeks of the validation workshop.
- Final Policy Brief & Summary Presentation:** A concise summary of findings and recommendations for policy & decision makers, and a presentation of the final results to the Ministry by the end of the 8th month.
- Draft Communication Materials:** Mock-ups of educational leaflets/posters and a plan for outreach activities by the end of the ninth month.

7. DURATION OF THE ASSIGNMENT

The total duration of the assignment shall be **nine (9) calendar months** from the date of signing the contract.

8. REPORTING LINES

The consultant(s) will work under the direct supervision and guidance of the Chief Fisheries Officer or a designated representative within the Fisheries Division, Ministry of Blue Economy and Marine Affairs. All deliverables must be submitted to this designated official for review and approval.

9. QUALIFICATIONS AND EXPERIENCE OF THE CONSULTANT

A. Required Qualifications:

- A degree or advanced university studies in Marine Fisheries, Fisheries Management, Marine Affairs, Environmental Science, or a closely related field.

B. Required Experience:

- A minimum of 7 years of proven professional experience in conducting evaluations in fisheries management, preferably in the Caribbean region.
- Demonstrated experience in designing and conducting socioeconomic surveys, quantitative and qualitative assessments with fishing communities.
- Strong technical knowledge of fishing gear technology, especially Beach seine nets and selectivity studies.
- A proven track record of working with government agencies and diverse stakeholders in a participatory manner.
- Excellent analytical, writing, and presentation skills.

c. Desirable Experience:

- Previous work experience in Grenada or the OECS region.
- Knowledge of the Beach seine fishery.
- Experience in developing fisheries management plans and policy.