

# **Scoping aquaculture development opportunities and formulation of a national strategy and costed work plan for the Grenada aquaculture sector**

## **Terms of Reference – Individual Consultant**

### **1. CONTEXT**

Small-scale coastal fisheries in Grenada is integral to the Grenada's food security, employment, and cultural heritage. There are approximately 835 vessels, and 2500 registered fishers directly employed in small-scale fisheries predominantly working from small vessels, typically ranging from 4 to 11 meters in length, and employ various fishing methods, including gill nets, trolling, hook and lines, seines, and pots. However, FAO has identified several challenges jeopardizing the sustainability of these fisheries. Overfishing, driven by both legal and illegal, unreported, and unregulated (IUU) activities, has led to the depletion of key fish stocks. Environmental degradation, including habitat loss and pollution, further exacerbates the decline in fish populations. Additionally, the lack of effective governance structures and enforcement mechanisms hampers the implementation of sustainable management practices. At the same time, growing populations and reduced fish production in the Eastern Caribbean states has led to more than 40 percent of fish consumed being imported. The daunting challenge that Grenada together with other Caribbean SIDS face, is to guarantee sufficient fish for the people and reduce the food import bill through increased domestic fish production which maintains the sustainability of fishery resources.

To stop the increase in the fish import bill and provide a supply of sufficiently high-quality fish and fishery products to a growing population in the Caribbean, aquaculture development has been proposed as an alternative source of fish protein supply. However, while aquaculture is reported to be the fastest growing food sector in the world, many conventional approaches to increase aquaculture production in Caribbean SIDS in recent decades have failed. Reasons for failure include: poor development planning within the wider processes of economic development of the coastal zone; lack of objective and informed aquaculture project preparation and appraisal; a limited role for the private sector as a key partner in any government or aid promoted development projects; limited and unrealistic market appraisals, and more unrealistic estimates of production, distribution and marketing costs; and lessons not being learned and risks not being adequately assessed.

Within the OECS region, “fit for purpose” statutory and regulatory frameworks for aquaculture development have not been established and there is an absence of relevant policies, laws, regulations and institutional mechanisms for their implementation and enforcement. Primary challenges Grenada and other OECS countries will need to confront to develop and sustain aquaculture include: (i) its informal nature such that, administrative processes (data collection, information management, and access to farm space) are neither systematic nor standardized, (ii) limited in-country technical expertise and resources to support the management, production aquaculture species, (iii) inadequate market assessments to determine to assess the potential to expand existing domestic businesses, (iv) the absence of aquatic animal health & biosecurity measures, and (v) a pragmatic assessment of the commercial viability of cultured species which is the cornerstone of a successful long term industry.

As a supplement to harvesting coastal fish resources, the Government of Grenada aspires to develop the aquaculture sector to ease fishing pressure on reef stocks, enhance food security, and assist in sustaining the enviable eco-tourism industry. With technical assistance provided through the “Unleashing the Blue Economy in the Caribbean (UBEC)<sup>[1]</sup>” project, the Government of Grenada invites qualified individual consultants to submit proposals for the study of aquaculture in Grenada. The study aims to provide a comprehensive analysis encompassing policy and governance frameworks, aquaculture species assessment, human resource evaluation, and market analysis

## 2. THE ASSIGNMENT

An individual consultant is required to assist the government of Grenada in drafting a national aquaculture development strategy and inclusive of a new policy document and costed work plan for its implementation.

## 3. SCOPE OF SERVICES

- Home-based reviews
- Participate in an inception meeting
- A gap analysis of the existing policy and governance framework for aquaculture in Grenada
- Assess and prioritize aquaculture species (fish and seaweed) based on their potential for sustainable development and economic viability
- Evaluate the human resources required to support aquaculture and recommend capacity-building measures
- Investigate markets and outline market access requirements for Grenadian aquaculture products
- Prepare a draft policy document to guide Grenada’s aquaculture strategy over the next 15-20 years.
- Preparation of technical reports
- Prepare a draft costed work plan to support implementation of priority activities of the new policy over a 5-year period
- Carry out site visits
- Coordinate / facilitate workshops

## 4. TASKS & DELIVERABLES

Under the overall supervision of the Chief Fisheries Officer (or their designate), the administrative supervision of the UBEC national Project manager and the technical supervision of the Division of Fisheries (FD) technical specialists, the consultant will complete a series of activities including:

**Task 1 – Project Inception meeting:** The IC will convene an inception meeting with the Grenada Fisheries Division (GFD) to discuss the scope of work to be carried out during the consultancy and seek preliminary clarifications on issues to be addressed during inception. Issues to be discussed include:

- i. Review of the relevant background documentation;

- ii. Scope of work to be completed during the consultancy and opportunities for follow up work;
- iii. Species considered by Grenada Fisheries Division as a priority for development;
- iv. Gaps analyses of: (i) policy and governance frameworks (including aquatic health, biosecurity, zoning and licensing / registration), (ii) human resource capacity, (iii) market knowledge, value addition and business opportunities, and (iv) private sector and community participation in aquaculture;
- v. Field visits to sites and consultations with communities;
- vi. The time frame to complete the consultancy;

The inception mission will also be used to: (i) agree work schedules and timing of in country visits, (ii) allocation of time for desk reviews and stakeholder consultations, (iii) confirm GFD national counterparts to facilitate collection and analysis of information, (iv) “on the job” training of GFD officers and involvement of national personnel in the assignment, and (v) seek clarification on any new issues pertinent to the assignment and confidentiality of information.

**Deliverable 1.** An agreed Inception workshop report and assignment work plan

**Task 2 – Snapshot of aquaculture in Grenada and OECS region:** The consultant will:

- i. Compile information on the characteristics of aquaculture production in OECS member States including description of aquaculture value chains and degree of organization, numbers of full time/part time persons working in the sector (by gender), types of work carried out, product forms, product forms, market outlets and sales volume and value.
- ii. Carry out site visits in Grenada in order to survey farmers, community leaders, vendors and others on their aspirations related to aquaculture; identification of potential problems associated with aquaculture zoning, water quality, on farm technologies, commercial viability; assess the vulnerability / fragility of culture operations; estimate the numbers of registered and non-registered farmers and their breakdown by gender.

**Deliverable 2.** A snapshot report describing the characteristics of aquaculture in Grenada and across the OECS region including information on social, technical, environmental and financial constraints faced by the sector; the interest of community leaders and individual farmers in community-based solutions.

**Task 3 – An assessment of national, regional and international markets for cultured products and product forms:** The consultant will:

- i. evaluate the current market landscape for cultured products in produced in the OECS region considering both domestic and regional demand;
- ii. assess the requirement for aquaculture products to meet international market standards and demand;

- iii. describe the conditions that must be met for Grenada aquaculture products to meet international market access requirements (including sanitary and phytosanitary measures / health certificates) and gaps that need to be addressed to gain access;
- iv. identify key product forms with the highest market potential and economic viability Grenada might consider as priority candidates for development;
- v. make recommendations on priority actions to be taken by the government of Grenada.

**Deliverable 3.** Aquaculture market assessment report

**Task 4 – Human resource capacity to manage the development of aquaculture:** The consultant will:

- i. Complete a capacity needs assessment of public and private sector entities regarding the availability of human resources, their skill levels and training to sustainably develop aquaculture in Grenada
- ii. review availability on training programs to address gaps identified in the training needs assessment;
- iii. Give due consideration to GFD staffing levels and annual recurrent budgets;
- iv. Make recommendations for capacity building in government and the private sector to develop aquaculture in a sustainable and cost-effective manner.

**Deliverable 4.** An aquaculture human capacity assessment Report with recommendations for HR capacity building actions over the next five years.

**Task 5 – Gap Analysis of policy and governance framework for aquaculture:** The consultant will:

- i. Assess the “fit for purpose” nature of aquaculture policy, legislation and regulatory frameworks including identification of gaps, weaknesses, and inconsistencies in the current legal and regulatory framework (gap analysis) including sanitary and phytosanitary measures (SPS), CODEX, CITES);
- ii. Prepare draft text for a new aquaculture policy document;
- iii. Consult with GFD on significant threats to sustainable development of aquaculture in Grenada;
- iv. Make recommendations to address gaps in the policy and governance frameworks;
- v. Prior to finalization of the report, present the findings through a workshop to senior managers and decision makers within government and receive the feedback prior to finalization.

**Deliverable 5.** A National level policy and governance framework Gap Analysis with: (i) draft text for a new aquaculture policy document; (ii) a work plan to carry out stakeholder consultations, and (iii) recommendations for amendments to aquaculture related legislation and regulatory frameworks.

## **5. CONSULTANCY STANDARDS AND TIME FRAME**

**Methods:** The consultant shall employ a robust methodology incorporating quantitative and qualitative research methods. The approach should be transparent, replicable, and align with international best practices.

**Stakeholder engagement:** Close collaboration with relevant government agencies, industry stakeholders, and local communities is imperative. The consultant must ensure the inclusion of diverse perspectives and engage stakeholders throughout the study.

**Reporting:** The consultant will provide a comprehensive report(s), detailing findings, analyses, and recommendations.

**Time Frame:** The consultancy is expected to be completed within 12 months from the contract commencement date with 60 days of consulting time to be used within this time period.

Tasks	Timeline	Payment Schedule
<b>Deliverable 1.</b> An Inception workshop report and agreed assignment work plan	1 month after contract signing	20%
<b>Deliverable 2.</b> A snapshot report describing the characteristics of aquaculture in Grenada and across the OECS region	3 months after contract signing	10%
<b>Deliverable 3.</b> Aquaculture market assessment report	6 months after contract signing	10%
<b>Deliverable 4.</b> An aquaculture human capacity assessment Report with recommendations for HR capacity building actions over the next five years.	8 months after contract signing	10%
<b>Deliverable 5.</b> A National level policy and governance framework Gap Analysis report including draft texts for a new aquaculture policy document	12 months after contract signing	50%

## 6. QUALIFICATIONS AND EXPERIENCE OF CONSULTANT

The individual consultant sought for the aquaculture study in Grenada should possess a well-rounded set of qualifications and experience to ensure the successful execution of the project. The following criteria are crucial for the consultant:

### Educational Background:

- Advanced degree (Master's or Ph.D.) in Aquaculture, Fisheries Management, Marine Biology, Environmental Science, or a closely related field.

### Professional Experience:

- A minimum of 10 years of professional experience in the aquaculture sector, with a focus on policy analysis, governance frameworks, and sustainable development.
- A Proven track record in conducting policy and governance analyses in the aquaculture or related sectors; Familiarity with international best practices and standards in aquaculture policy development.

- Extensive experience in assessing and prioritizing aquaculture species, including both fish and seaweed, for economic viability and sustainable development; Demonstrated knowledge of market trends and consumer preferences related to aquaculture products.
- Previous involvement in evaluating human resources requirements for aquaculture development projects; Experience in identifying skill gaps and proposing strategies for capacity building within the aquaculture workforce.
- Proven expertise in conducting market analyses for aquaculture products; Understanding of market dynamics, both domestic and international, with the ability to identify market opportunities and challenges.
- Successful completion of similar studies, preferably in Small Island Developing States or regions with similar ecological and socio-economic contexts; Experience working on projects funded by international organizations or development agencies, with a focus on sustainable development.

#### **Technical skills**

- Proven project management capabilities and responsibility for ensuring compliance and ensuring the overall quality and timeliness of deliverables;
- Excellent team leadership skills, including ability to lead the team by coaching and mentoring team members to achieve individual inputs, and managing diverse intercultural teams of national and international experts under challenging circumstances;
- Experience working with fisheries stakeholders and local communities on natural resources management and ecosystem services strongly preferred;
- Ability to think innovatively and propose creative solutions to address challenges in the aquaculture sector; Familiarity with emerging trends and technologies in aquaculture.

#### **Data Analysis and Research Skills:**

- Proficiency in data analysis and research methodologies relevant to small-scale aquaculture.
- Ability to gather and analyse data to inform the development of aquaculture.

#### **Communication and Stakeholder Engagement skills:**

- Strong interpersonal and communication skills to effectively engage with diverse stakeholders, including government agencies, industry representatives, and local communities;
- Experience in facilitating workshops, interviews, and focus group discussions;
- Strong written and verbal communication skills to prepare comprehensive high quality reports and communicate findings and recommendations effectively.
- Fluent in English with excellent written and oral communications skills.
- Awareness and understanding of the cultural and geographical context of Grenada; Sensitivity to local communities and their role in sustainable aquaculture development.

The selected consultant should demonstrate a commitment to excellence, ethical conduct, and sustainability principles throughout the study. The ability to work collaboratively with diverse

stakeholders and deliver actionable recommendations is crucial for the success of the aquaculture development project in Grenada.

<sup>[1]</sup> <https://projects.worldbank.org/en/projects-operations/project-detail/P171833>