

TERMS OF REFERENCE (TOR)
CONSULTANCY SERVICES FOR DESIGN, BUILD & INSTALLATION
OF HYDROPONIC SYSTEM TO SCHOOLS

1. Client

The client for this assignment is **Climate Smart Agriculture & Rural Enterprise Programme (SAEP)**.

2. Country background

Grenada is a small island development state within the southern Caribbean.

3. Background of Project

The Climate-Smart Agriculture and Rural Enterprise Programme (SAEP) is a six-year (2018-2024) programme co-funded by the Government of Grenada (GOG) the International Fund for Agricultural Development (IFAD) and the Caribbean Development Bank (CDB). SAEP's development goal is to contribute to the reduction of poverty and vulnerability of men and women in rural communities in the tri-island state of Grenada.

SAEP will be implemented through two (2) main Components namely: Entrepreneurship and Business Development (Component 1) and Climate Smart Agriculture (Component 2). Outcome Two: Climate Smart Agriculture is focused on farmers having increased their sustainability through Climate Smart Agriculture (CSA) Awareness, Climate Smart Sustainable Fishing (CSSF) Awareness, Grant Financing, CSA Extension Support, Marketing, and information on Nutrition. This CSA Component is being implemented by the Ministry of Agriculture, Forestry and Lands (MOAL), Fisheries Department and the Ministry of Carriacou and Petite Martinique Affairs (MCPMA).

4. Background of the assignment

Grenada like many of the other small island developing state (SIDS) in the region are confronted with the negative impact of climate change such as extended drought cycles, variability in rainfall, intensity of rainfall, elevated temperatures, increase in sea water. The impact of climate change has also negatively impacted the natural resources (land, sea). The agriculture sector has been directly impacted by climate change resulting in economic losses and disruption in livelihoods, attributed to low productivity, poor crop yields and quality, the increase incidence of pest and diseases and more.

As part of the intervention to climate change through adaptation and to promote food and nutrition security. The Government of Grenada through its Supplemental Budget has provided

funding to the SAEP to implement a project on innovation in agriculture specifically the implementation of fifteen (15) hydroponic systems for 15 identified schools in Grenada and Carriacou. These systems are to be used as teaching aid for 4Hers and the wider community.

5. Overall Objective

SAEP is desirous of retaining a Consultant to design, build and install as well as provide training and technical support for hydroponic system for 15 schools as outlined in Annex 1. Consultant must have the ability to provide the requested services in a timely manner with the required technical capacity, resources.

The overall objective of the project is to introduce innovations in agriculture at an early age through the introduction of the hydroponic system to fifteen (15) schools in Grenada and Carriacou in an effort to promote food and nutrition security whilst promoting sustainable agriculture through climate smart agriculture (CSA).

6. Goal and Objective of the assignment

The main goal of the consultancy is to install 15 hydroponic systems for schools and to build the capacity of students and teachers in modern agriculture practices thus promoting a culture of agriculture development.

Objectives

- To introduce to the 4Hers a CSA practice through the introduction of hydroponic systems to 15 schools in Grenada.
- To build the capacity of teachers and students on hydroponic farming.
- To use the hydroponic systems as a demo model to promote transformation in the agriculture sector commencing with youths

7. Scope of Work

The Consultant would be responsible for:

- a) Design the hydroponic system (NFT) system with a capacity of 300 plants with all the components that constitute such system including pipes, pumps, electrical fittings, reservoirs, plumbing fittings, testing equipment and consumables
- b) Preliminary assessment of all selected sites has been undertaken – details can be furnished to facilitate the design of the units per site.
- c) Procure and supply all materials for the construction of the 15 units
- d) Install the hydroponic systems as per scope of works in collaboration with SAEP for the execution of the consultancy.
- e) Provide technical training to the schools (4 H leaders, 4 H officers, Principals, other staff identified) for the upkeep of the units (operation and maintenance)
- f) Allow for monitoring of the systems for the 1st quarter of the operation.

	Activity/Task	Deliverable	No. of Man-Days
1.	Assessing the sites to aid in the preparation of the proposal document and submission.	Site assessment report – preliminary assessment concluded – information can be used to aid in proposal preparation.	1
2.	An inception meeting with the consultants/contractors and SAEP project staff, to review the scope of work to be carried out with the aim of ensuring full agreement on the assignment, scope, timetable, and deliverables.	Inception report and workplan.	1
3.	Awarding of contract and commencement of works.		1
4.	Procurement of Materials as per BOQ	Receipt of materials	1 month
5.	Construction of hydroponic systems	Completion of units	1 month
6.	Delivery of systems to schools	Handover of units	1 week

8. Reports and schedule of deliverables

The duration of the consultancy is expected to be completed within 8 weeks after the signing of the contract. The Consultant will complete the following:

Activities	Timeline	Payment Schedule
Confirmation of consultant and signing of contract	Nov 30, 2024	20% of contract sum
Execution of activities (4 to 6 – based on workplan)		
Installation of 8 systems in 8 schools	December 30, 2024	40% of contract sum
Installation of 7 systems in 7 schools	January 20, 2025	30% of contract sum
Inspection of systems, and close out activity	Jan 30, 2025	10% of contract sum

9. Consultant qualifications and experience

a) Qualifications and skills

- Certificate in hydroponic farming or building technology or related field.

- Minimum of 5 years' experience in the construction of hydroponic systems with a proven track record of actual works conducted. (please provide examples with your submission).
- Technical capacity in hydronic design, costing and installation.
- Great Communication skills
- Be able to demonstrate practical applications of hydroponic construction including testing and monitoring.

b) General Professional Experience

- Knowledgeable in hydroponic construction and application including the requirements for operationalization.
- Experience working with 4hers, farmers, community groups.
- Have a Valid Driver's license.
- Ability to procure the services of workers

10. Location and period of execution

Location of the Assignment:

The Consultancy is primarily base in Grenada.

Estimated Duration of the Consultancy

- a) The activities should be carried out between **November 30th, 2024**, and **January 30th, 2025**

11. Project coordination

The Consultant will be hired under GOG MOED-SAEP terms of contract and supervised by the Programme Manager solely for the purpose of delivering the above objectives, within the agreed time frame. The Consultant will be required to work along with the CSA Coordinator, Technical Coordinator, M&E Specialist and Extension Assistants during the life cycle of the project. As well as interface with the Ministry of Education (MOE) through the principal or 4H leader and the Ministry of Agriculture (MOA) 4 H division.

12. Services and facilities to be provided by Client

SAEP will provide the following services and facilities to the consultant to ensure that the assignment completed in a timely manner:

- a) SAEP will make available the funds to the Consultant for procuring and constructing the hydroponic systems based on the agreed payment schedule as outline in the contract document.
- b) SAEP will be responsible for communicating with the schools on the activity.
- c) SAEP will be responsible for providing any pertinent information needed in this Assignment such as the preliminary assessment of the sites selected.

13. Services and facilities to be provided by the Consultant

The Consultant is responsible for:

- a) Provide a Technical and Financial Proposal for carrying out this consultancy.
- b) Developing workplan and carrying out of the activities as per scope of works.
- c) Procure and construct the hydroponic systems as per design.

Annex 1.0 Proposed lots for hydroponic system.

No	Constituency	Name of School
1	Carriacou and Petite Martinique	Mt. Pleasant Government School
2	St. Andrew Southeast	Brichgrove RC School
3	St. Andrew Southwest	Munich RC School
4	St. Andrew Northeast	Tivoli RC School
5	St. Andrew Northwest	Paraclete Government School
6	St. David	St. Theresa's RC School
7	Town of St. George	St. George's Methodist (River Road)
8	St. George Northeast	Constantine Methodist School
9	St. George Northwest	Happy Hill RC School
10	St. George Southeast	Woburn Methodist School
11	St. George South	South St. George Government School
12	St. John	St. Peters RC School
13	St. Mark	Bonaire Government School
14	St. Patrick east	St. Patrick Anglican
15	St. Patrick west	Hermitage Government School