

**GOVERNMENT OF SAINT LUCIA
BUILDING RESILIENCE FOR ADAPTATION TO CLIMATE CHANGE AND CLIMATE
VARIABILITY IN AGRICULTURE IN SAINT LUCIA PROJECT**

VULNERABILITY ANALYSIS SPECIALIST

TERMS OF REFERENCE

1. BACKGROUND

1.01 The Government of Saint Lucia has received financing from the Caribbean Development Bank in an amount equivalent to USD9,858,570 towards the cost for the Building Resilience for Adaptation to Climate Change and Climate Variability in Agriculture in Saint Lucia Project. The objective of the Project is to build resilience in Saint Lucia's agriculture sector for livelihoods security through enhanced adaptive capacities for climate change and climate variability. The project design responds directly to the need to build adaptive capacities of agro-ecosystems and livelihoods given the projections of significant decreases in rainfall, more frequent and intense hydro-meteorological events, including droughts as reported in the country's Third National Communication (TNC) to the United Nations Framework Convention on Climate Change. The Project will contribute positively to the strategic objectives of Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028. It is also well aligned with the TNC recommendations for climate adaptation measures to enhance resilience in agriculture and with the proposals under the National Agriculture Policy Sectoral Adaptation Strategy and Action Plan (2018).

1.02 The Project is also responsive to Saint Lucia's Nationally Determined Contributions (NDCs) to address food security, community and national level interventions in water resource conservation and management. Gender equality will be mainstreamed throughout the Project to ensure gender equity is embedded in project interventions. An estimated 12,000 farmers and their families are expected to be direct beneficiaries of the Project.

2. INSTITUTIONAL ARRANGEMENTS

2.01 The objective of the consultancy is to provide technical support to the Ministry of Agriculture, Fisheries, Food Security and Rural Development in building the required level of capacity for strengthening, monitoring and sustaining reduction in landslips, soil erosion and other vulnerabilities on farm through the creation of updated maps, and through field practices for disaster risk reduction, disaster risk management and Farmer Field school to build climate resilience in farming systems.

3. SCOPE OF SERVICES

3.01 The Scope of Services includes:

- (a) Review and assess the available landslip maps and spatial data and evaluate their usefulness to support the work with the Project Management Unit (PMU).
- (b) Conduct vulnerability analyses to determine the level of vulnerability and relevance of soil amelioration measures proposed in the project document. These analyses must be

corroborated with ground truthing of sites of regions 1, 2, 6 and 7, in collaboration with the PMU.

- (c) Review and assess the vulnerability in Regions 1, 2 and 6 to evaluate the relevance of proposed project implementation activities in these zones. This must take into consideration the findings of the ESMP.
- (d) Provide leadership to the Project Team Leaders for the field work to update the work processes and map(s) that enhance resilience, to conduct inventory of farms in the areas and prepare overlay maps, rank slips, and identify farms to benefit from the project activity.
- (e) Provide leadership to the Project Team Leaders for the field work to update the landslip map(s).
- (f) Provide leadership through training sessions to the Project Team and the Department of Agriculture, Fisheries, Natural Resources and Cooperatives to build capacity through performing field work to using the databases:
- (g) Update the resilience /vulnerability map(s).
- (h) Conduct inventory of farms in the target areas and preparation of overlay maps;
- (i) Demonstrate dynamic Ranking of vulnerabilities and identification of farms to benefit from interventions pre and post project activities.
- (j) Recommend climate adaptation options and codes for community-based disaster risk management participatory approaches based on the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis.
- (k) Provide training to the Project Team Leaders, and using a participatory approach, make recommendations for use of the most suited climate change adaptation practices for hillsides and other vulnerable areas identified, to reduce the vulnerability and enhance resilience to other climatic impacts over the first twelve (12) months of project activities.
- (l) Prepare technical recommendations for the Project Team Leaders and the Ministry of Agriculture, Fisheries, Food Security and Rural Development staff and farmers to continue the work over the next 12 months, with 4 one-week visits to the sites to observe the progress in built resilience on the vulnerable farms identified based on the SWOT analysis.
- (m) Prepare a Final Report with recommendations for further work to reduce landslips in the area.

4. **REPORTING**

4.01 **Inception Report:** The report should outline initial observations, review the data, and survey instrument, identify data gaps, describe the approaches to be used in data collection, and present a detailed work plan for the delivery of the scope of services, with clear outputs. To be submitted within three weeks after the start of services.

4.02 **Progress Report:** This report should provide a preliminary assessment of data collected, vulnerability assessments and an analysis of the farm inventory. This is to be submitted six (6) weeks after

the start of services.

4.03 **Report on the Assessment of the Maps:** To be submitted eight weeks after the start of services. All maps should be updated. These include but will not be limited to:

- (a) Land slip maps.
- (b) Drought vulnerability maps.
- (c) Soil health maps.
- (d) Maps of prioritised site areas using multidimensional approaches and related policies to protect and build resilience, in the adaptive capacities of agriculture sector.

4.04 These maps should demonstrate the ranking of vulnerabilities and identification of farms to benefit from interventions pre and post project activities. The preliminary assessment report should guide the work plan for the first eighteen (18) months of the project activities.

4.05 **Training manual and conduct training sessions to guide the field activities:**

At the end of twelve (12) weeks a training manual and sessions should be completed to achieve the following objectives:

- (a) Updating the landslip maps and other relevant data to identify vulnerabilities.
- (b) Determine the adaptive capacity for building resilience in the farm community using the existing data sets.
- (c) Recommending disaster risk reduction activities in the areas identified to reduce vulnerability.
- (d) Recommend climate adaptation options and codes for community-based disaster risk management participatory approaches based on the SWOT analysis.

4.06 **Final Report:** Prepare a Final Report that includes recommendations for further work to reduce landslips in the area. The Final Report should be submitted sixteen (16) weeks after the start of services.

5. **QUALIFICATIONS AND EXPERIENCE**

5.01 The individual is expected to possess the following minimum qualifications:

Mandatory:

- (a) A post graduate degree in Geographic Information Systems, Geomatics, Land Management, Civil Engineering, Disaster Risk Management, or other relevant subject area. For agriculture
- (b) A minimum of ten years' experience working in the area land and disaster risk management is required.
- (c) Excellent command of English, including good writing skills and verbal communication skills are required.
- (d) Proven ability and experience in the use and management of GIS software. (ARCGIS or QGIS).

Desirable:

- (e) At least five years working experience in agriculture, climate change or sustainable development.
- (f) Experience in small island developing states and the Caribbean region would be an advantage.

6 DURATION

6.01.1 The duration of the assignment is 100 days over 12 months with the first 80 days to be done in the first four months of the start of the assignment.