

ENHANCING SUSTAINABILITY AND RESILIENCE OF THE AGRICULTURE SECTOR IN THE COMMONWEALTH OF DOMINICA PROJECT

DRAFT TERMS OF REFERENCE

LAND MANAGEMENT SPECIALIST

1. BACKGROUND

1.01 Climate Change (CC) and disaster impacts pose significant threats to Dominica's agricultural sector, undermining its stability and sustained productivity. There is also increasing concern with the differential impact of CC and disaster risks on the lives and livelihoods of women, men, and their families, increasing the vulnerability of poor households. The country's economy relies heavily on tourism and agriculture, making it vulnerable to economic shocks and climate-related disasters such as those resulting from tropical storms, hurricanes, and floods. The increasing frequency and severity of extreme weather events, along with recurrent CC impacts, are causing significant damage to crucial agricultural infrastructure and devastating crop production areas. This, in turn, undermines the stability and sustained productivity of the agriculture sector and, consequently, threatens Dominica's food security. The agriculture sector plays a critical role in Dominica's economy, contributing 16 percent (%) to the country's gross domestic product in 2022 and employing around 25 - 40% of the workforce. The sector has always been very important for Dominica, determining food and nutritional security outcomes and representing a key driver of economic activity.

1.02 The country also faces other challenges including lands left idle or underutilised, limited land use planning to protect agricultural land and high levels of rural youth unemployment. The absence of comprehensive databases also delays the process of selecting available land, surveying and allocating subdivided holdings to available farmers. In order to promote sustainable agriculture production, and support the sustainable management of rural lands, in particular idle and underutilised lands, the Government intends to support development of a national land bank policy.

1.03 Against this background, Dominica has obtained a grant from the Caribbean Development Bank for a TA project to help address some of the pressing challenges confronting the country's agricultural sector. As designed, the TA project will foster positive transformation in the sector by improving agricultural practices, embracing climate-resilient technologies, and enhancing resilience-building efforts.

1.04 The project is now seeking a consultant to analyse existing soil data in Dominica and produce digital soil maps and communication materials.

2. OBJECTIVE

2.01 The objective of the consultancy is to utilize the existing national soil database to conduct a spatial analysis to develop a comprehensive solution framework focusing on land capability, irrigability, degradation and crop suitability classifications, and engineering properties, to inform policymakers, farmers, and engineers on making informed decisions that enhance agricultural productivity, protect the environment, and support resilient infrastructure development.

3. SCOPE OF SERVICES

3.01 The following are the main activities of the consultancy:

- (a) Conduct a detailed desk review of available soil data in Dominica, in particular, the soil database developed under the Disaster Vulnerability Reduction Project and Cocoa Cluster Development Project.
- (b) Carry out an exhaustive review of all available national maps and cartographic material in Dominica related to the classification of different soil types.
- (c) Conduct consultations with key stakeholders to obtain additional information on soil types, land use and variability in rainfall patterns and to ascertain the intended use of the soil maps.
- (d) Review and harmonise the data collected.
- (e) Analyse the data collected focusing on spatial variability in soil types, topography, pH levels, and rainfall patterns and may include other relevant variables.
- (f) Define the appropriate working scale of the map and the minimum mapping unit.
- (g) Generate digital farm soil maps based on the analyses of the variables described above, that would show the composition, key features and composition of farmland.
- (h) Validate the information presented in the digital soil maps and verify through field observations.
- (i) Present the digital soil maps to the Ministry of Agriculture and other agriculture related agencies.
- (j) Develop communication materials to support the use of digital soil maps for agricultural stakeholders.

4. QUALIFICATIONS AND EXPERIENCE

4.01 The ideal candidate for the position of Land Management Specialist should possess the following qualifications and experience:

- (a) A Post Graduate Degree in soil science, agronomy, geology, or related discipline.
- (b) At least 5 years experience in preparing digital soil maps, description and analysis, land use planning and land management.
- (c) At least 7 years Experience in conducting soil analysis in the agriculture sector, preferably in similar equatorial tropical regions.
- (d) Working knowledge and experience in monitoring, evaluation and spatial analysis.
- (e) Experience in environments with similar landscapes and geomorphology to Dominica would be an advantage.
- (f) Proven track record in producing high-quality technical reports.
- (g) Strong organizational and leadership skills, with the ability to manage multiple tasks and stakeholders simultaneously.
- (h) Excellent presentation skills with written and oral communications are desired.
- (i) Excellent communication and interpersonal skills, with the ability to engage and collaborate with diverse stakeholders.
- (j) Proficiency in English.

5. REPORTING AND DELIVERABLES

5.01 The Consultant will report to the Project Coordinator and is required to deliver:

- (a) An Inception Report including a work plan.

- (b) Prepare a Report on the analysis conducted in (e) in the Scope of Services.
- (c) Digital Soil Maps that can help to inform agronomic decisions including land use planning and conservation.
- (d) Communication material to support the use of digital soil maps for agricultural stakeholders.

6. DURATION

6.01 The duration of the consultancy services is expected to be approximately 22 working days over the period of three months.