



**Part I: Project Information**

**GEF ID**

10980

**Project Type**

MSP

**Type of Trust Fund**

GET

**CBIT/NGI**

CBIT No

NGI No

**Project Title**

Enhancing Land Management and Strengthening Ecosystem Resilience for Integrated Landscape Restoration and Climate-Resilient Food Systems in Carriacou, Grenada

**Countries**

Grenada

**Agency(ies)**

UNEP

**Other Executing Partner(s)**

Partnership Initiative for Sustainable Land Management (PISLM) in Caribbean Small Island Developing States (CSIDS)

**Executing Partner Type**

Others

**GEF Focal Area**

Land Degradation

**Sector**

**Taxonomy**

Focal Areas, Land Degradation, Sustainable Land Management, Improved Soil and Water Management Techniques, Ecosystem Approach, Integrated and Cross-sectoral approach, Restoration and Rehabilitation of Degraded Lands, Sustainable Agriculture, Community-Based Natural Resource Management, Land Degradation Neutrality, Land Cover and Land cover change, Land Productivity, Carbon stocks above or below ground, Climate Change, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Climate Change Adaptation, Climate resilience, Influencing models, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Stakeholders, Local Communities, Private Sector, Individuals/Entrepreneurs, Type of Engagement, Partnership, Information Dissemination, Participation, Consultation, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Beneficiaries, Communications, Awareness Raising, Behavior change, Education, Public Campaigns, Gender Equality, Gender results areas, Capacity Development, Knowledge Generation and Exchange, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Women groups, Capacity, Knowledge and Research, Learning, Knowledge Generation, Knowledge Exchange

**Rio Markers**

**Climate Change Mitigation**

Significant Objective 1

**Climate Change Adaptation**

Significant Objective 1

**Biodiversity**

No Contribution 0

**Land Degradation**

Principal Objective 2

**Submission Date**

5/11/2023

**Expected Implementation Start**

9/1/2023

**Expected Completion Date**

9/1/2026

**Duration**

36 Months

**Agency Fee(\$)**

82,008.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

<b>Objectives/Programs</b>	<b>Focal Area Outcomes</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
LD-1-4	Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape	GET	647,431.00	1,672,500.00
LD-2-5	Create enabling environments to support scaling up and mainstreaming of SLM and LDN	GET	215,811.00	557,500.00
<b>Total Project Cost(\$)</b>			<b>863,242.00</b>	<b>2,230,000.00</b>

## **B. Project description summary**

### **Project Objective**

To effectively address land degradation in Carriacou, through demonstration and application of ecosystems-based landscape restoration, sustainable land management and good agricultural practices, using community participatory approaches that expands diversification and sustainability of livelihoods options.

<b>Project Component</b>	<b>Financing Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>GEF Project Financing( \$)</b>	<b>Confirmed Co- Financing( \$)</b>
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Community-Based Landscape Rehabilitation and Protection using EbA approaches	Investment	<p><b>1.1</b> Stakeholders supported to <b>rehabilitate landscapes at Bellevue South Dumfries</b> (designated hotspots under the LDN target-setting programme) by applying EbA solutions</p> <p><i>Indicators:</i> % of restoration target area that incorporate climate-resilient SLM and restorative measures based on nature-based solutions that serve as demonstrations to stakeholders;</p> <p>(ii) # of water conservation installations where communities have adopted functioning</p>	<p><b>1.1.1: One plant propagation facility</b> for multiplication of planting material to support land restoration by farmers and community members.</p> <p><b>1.1.2: At least 250 ha restored grasslands, agricultural lands at Bellevue South Dumfries</b> through improved soil and land conservation measures implemented by farmers and community members.</p> <p><b>1.1.3: Five water conservation installations</b> to enhance moisture retention at sites restored by farmers and</p>	GET	552,266.00	1,965,000.00

<b>Project Component</b>	<b>Financing Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>GEF Project Financing(\$)</b>	<b>Confirmed Co-Financing(\$)</b>
		<i>maintenance schemes</i>	community members.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2: Strengthening landscape governance for application of SLM and EbA tools	Technical Assistance	<p><b>2.1</b> Uptake of SLM and EbA tools and methods leads to <b>strengthened local governance, coordination and capacity for integrating EbA restoration solutions within productive landscapes</b> by key stakeholders from government agencies, farmers and the community</p> <p><b>Indicators:</b>  <i>(i) Coordination mechanism for SLM in Carriacou adopted by stakeholders;</i>  <i>(ii) Increase in adoption of SLM and climate smart measures by farmers and stakeholders within land holdings (based on field assessment)</i></p>	<p><b>2.1.1:</b> <i>Effective local coordination mechanism for SLM including co-management protocols for savannah grass lands</i> for implementation by local government agencies, farmers, livestock owners and the local community</p> <p><b>2.1.2:</b> <i>Package of gender-sensitive SLM approaches/ technologies and training events</i> for uptake and application over <b>635 ha</b> by farmers and community beneficiaries and made available through online knowledge platforms.</p> <p><b>2.1.3: Public awareness</b></p>	GET	232,500.00	107,000.00



Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
		<i>surveys); (iii) Protocol for SLM/savanna land mgmt. endorsed by the local community.</i>	<i>and education plan implemented targeting farmers, school children and the community.</i>			
			<i>2.1.4 Gender Sensitive Monitoring and Evaluation Framework in Support of Project Implementation.</i>			
				<b>Sub Total (\$)</b>	<b>784,766.00</b>	<b>2,072,000.00</b>
<b>Project Management Cost (PMC)</b>						
	GET			78,476.00		158,000.00
				<b>Sub Total(\$)</b>	<b>78,476.00</b>	<b>158,000.00</b>
				<b>Total Project Cost(\$)</b>	<b>863,242.00</b>	<b>2,230,000.00</b>

Please provide justification

**C. Sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Recipient Country Government	Ministry of Agriculture and Lands, Fisheries & Cooperatives	In-kind	Recurrent expenditures	1,350,000.00
Recipient Country Government	Ministry of Carriacou and Petit Martinique Affairs	In-kind	Recurrent expenditures	650,000.00
Beneficiaries	Carriacou Farmers Association	In-kind	Recurrent expenditures	30,000.00
Other	PISLM Secretariat	In-kind	Recurrent expenditures	200,000.00
<b>Total Co-Financing(\$)</b>				<b>2,230,000.00</b>

**Describe how any "Investment Mobilized" was identified**

N/A

**D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
UNEP	GET	Grenada	Land Degradation	LD STAR Allocation	863,242	82,008	945,250.00
<b>Total Grant Resources(\$)</b>					<b>863,242.00</b>	<b>82,008.00</b>	<b>945,250.00</b>

**E. Non Grant Instrument**

NON-GRANT INSTRUMENT at CEO Endorsement

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Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

**F. Project Preparation Grant (PPG)**

PPG Required **true**

**PPG Amount (\$)**

50,000

**PPG Agency Fee (\$)**

4,750

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
UNEP	GET	Grenada	Land Degradation	LD STAR Allocation	50,000	4,750	<b>54,750.00</b>
<b>Total Project Costs(\$)</b>					<b>50,000.00</b>	<b>4,750.00</b>	<b>54,750.00</b>

## Core Indicators

### Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
250.00	250.00	0.00	0.00

#### Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Cropland	250.00	125.00		

#### Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

#### Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Natural grass		125.00		

#### Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

### Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
635.00	635.00	0.00	0.00

#### Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
<b>Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations</b>			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

**Indicator 4.3 Area of landscapes under sustainable land management in production systems**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
635.00	635.00		

**Indicator 4.4 Area of High Conservation Value or other forest loss avoided**

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

**Indicator 4.5 Terrestrial OECMs supported**

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

**Documents (Please upload document(s) that justifies the HCVF)**

Title	Submitted

**Indicator 6 Greenhouse Gas Emissions Mitigated**

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)	76656	76656	0	0
Expected metric tons of CO <sub>2</sub> e (indirect)	0	0	0	0

**Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector**

<b>Total Target Benefit</b>	<b>(At PIF)</b>	<b>(At CEO Endorsement)</b>	<b>(Achieved at MTR)</b>	<b>(Achieved at TE)</b>
Expected metric tons of CO <sub>2</sub> e (direct)	76,656	76,656		
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting	2023	2023		
Duration of accounting	20	20		

**Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector**

<b>Total Target Benefit</b>	<b>(At PIF)</b>	<b>(At CEO Endorsement)</b>	<b>(Achieved at MTR)</b>	<b>(Achieved at TE)</b>
Expected metric tons of CO <sub>2</sub> e (direct)				
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

**Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)**

<b>Total Target Benefit</b>	<b>Energy (MJ) (At PIF)</b>	<b>Energy (MJ) (At CEO Endorsement)</b>	<b>Energy (MJ) (Achieved at MTR)</b>	<b>Energy (MJ) (Achieved at TE)</b>
<b>Target Energy Saved (MJ)</b>				

**Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)**

<b>Technology</b>	<b>Capacity (MW) (Expected at PIF)</b>	<b>Capacity (MW) (Expected at CEO Endorsement)</b>	<b>Capacity (MW) (Achieved at MTR)</b>	<b>Capacity (MW) (Achieved at TE)</b>

**Indicator 11 People benefiting from GEF-financed investments**

	<b>Number (Expected at PIF)</b>	<b>Number (Expected at CEO Endorsement)</b>	<b>Number (Achieved at MTR)</b>	<b>Number (Achieved at TE)</b>
<b>Female</b>	400	400		
<b>Male</b>	400	400		
<b>Total</b>	800	800	0	0



Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

CI- 3: The estimated hectares of land to be restored was derived from field assessment that was then cross-referenced against Google Earth imagery over the most severely degraded areas that are easily recognized in the satellite imagery (heads-up polygon trace against the imagery). The estimate of agricultural land to be restored is 125 ha (sub-indicator 3.1) and the estimate of the grasslands (sub-indicator 3.3) to be restored is 125 ha. This was derived based on the following: of the main land use types on Carriacou, annual crops account for an estimated 22% of the overall target area of the project (885 ha), perennial crops 28%, and grasslands 50%. This ratio was therefore applied over the 250-ha restoration target, where the annual and perennial crop covers were combined (50%) and the grasslands (50%). CI-4: The area of landscapes under improved practices was also derived using a similar approach as outlined above, where field surveys were conducted and Google Earth imagery used to corroborate the geographical footprint that corresponds to areas under agriculture (crop and grazing) and other mixed use that are undergoing degradation, and/or that have the potential for degradation, based on trends in land use and land use conversions. CI-6: The quantum of greenhouse gas emissions mitigated was derived using the FAO Ex-Ante Carbon Balance Tool based on an accounting duration of 20 years. The total area to be transformed under project interventions is 885 ha (250 under restoration and 635 under improved management) and specifications of the inputs (N/urea, P, K and compost applications) were made, based on estimated uses and forecast under the project. CI-11: The number of direct beneficiaries was based on number of active farmers, livestock owners and other stakeholders that are closely dependent on associated livelihoods in the agricultural sector.

## Part II. Project Justification

### 1a. Project Description

1. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

**Overview and environmental context:** Carriacou is 34 km<sup>2</sup> and is the largest and most populated of the group of islands known as the Grenadines. It is located at 12°28'N and 61°28'W and is a dependency of the State of Grenada. The highest point on the island is High North Peak, at 291 metres above sea level. Carriacou, like Grenada and the other islands in the Grenadines, is of volcanic origin, but the terrain is less hilly than Grenada's, where about 50% of the land has slopes greater than 20 degrees (Niles, 2013). The soils of Carriacou are primarily made up of Woburn Clay Loam (65.2%) and Limlair Clay (16.0%). These soils are not suitable for intensive cultivation on slopes of 10 degrees or more without soil conservation measures, yet cultivation has been and continues to be carried out on much steeper slopes with little use of anti-erosion<sup>[2]</sup> control measures.

Carriacou is significantly drier in comparison to mainland Grenada, owing to the small size of the landmass and lower elevation, meaning that the orographic rainfall potential is low. The annual average rainfall is approximately 1,000 mm (CEHI, 2007). The streams on the island are intermittent with surface flow originating from the central areas and draining towards the coast. Twenty distinct watershed units are differentiated on the landscape (Map 1b and Annex E). High runoff can occur in extreme rainfall events owing to the coincidence of geology, topography, and drainage factors, where upland areas are subjected to accelerated erosion while low-lying areas experience flooding.

Carriacou is completely reliant on rainwater harvesting to meet their needs for potable water, owing to extremely limited natural water capture on these islands. Water is supplied through 33 community rainwater catchments and public buildings such as schools, hospitals and churches have also installed communal cisterns, which number 78 altogether (CEHI, 2007). In 2015, a solar powered desalination plant was commissioned with a supply capacity of 312 m<sup>3</sup>/day along with a storage tank and limited water distribution system for Hillsborough area. However, the system has encountered maintenance and operational problems since commissioning and has seldom been able to provide a consistent supply (Cashman and Yawson, 2019)<sup>[3]</sup>.

The main forested region on Carriacou is the High North Forest Reserve, a designated protected area<sup>[4]</sup> that covers approximately 559 hectares and runs along the higher elevations of the central-northern ridge of the island (Government of Grenada, 2014a). The High North Peak is also a designated protected area (99 ha) surrounding the highest elevation on the island. While it is a protected area and legally

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established, there is no management plan in place. The High North Addition Protected Area (152 ha) extends to the northern coast from the High North Peak. This protected area encompasses the complete spectrum of ecological systems in Carriacou with dry thorn scrub deciduous forests found on the northwest slope descending to seasonal evergreen forests on the alluvial flats leading to L'Ance La Rouche[5]<sup>4</sup>. The other protected areas on the island include Sabazan, a small 26 ha terrestrial area at Bretache Bay along with five coastal/marine protected areas; Limlair Theboud (24 ha), Grand Bay (18 ha), South Carriacou Islands (2,510 ha) and Sandy Island-Oyster Bay (695 ha). Important mangrove systems in Carriacou include: Petite Carenage Bay, Saline Island, Tyrrel Bay, and Lauriston Point (Env. Profile,1991). The main threats to forest and wildlife biodiversity are the clearing of the land for agricultural production, animal tethering, housing settlement, infrastructure and commercial activities[6]<sup>5</sup>.

**Socio-Economic Context:** At the 2019 population, Carriacou's population was 9,595[7]<sup>6</sup>. The main town and primary port of entry is Hillsborough, and the other main settlements on the island are the villages of L'Esterre, Harvey Vale and Windward. Carriacou's economy is distinct from that of mainland Grenada, reflecting its different historical socio-economic development. The economy of the island has been historically based on agriculture and fishing, though over the last 30 years, a small tourism-based service economy has emerged, providing additional employment opportunities in hotels, yacht servicing, water taxi operation, among others. This has been alongside employment opportunity in the construction, and government sectors. Fishing and agriculture (including livestock-rearing) still forms a mainstay of the island's economy. Further detailed analysis on Carriacou's socio-economic activities is limited as the central government does not keep disaggregated data.

According to the Carriacou Farmers Association, there are approximately 800 registered farmers on Carriacou, but of these, less than twenty are commercial, and three practice irrigation, having just over one hectare each under cultivation. In 2001 approximately 34% of the land area was under some form of agricultural practice, cultivated, or pasture; this had decreased to 27% by 2012 (Cashman and Yawson, 2019). Local production is currently insufficient to meet food requirements of the island, hence produce is imported from mainland Grenada. Presently, agricultural activity remains largely at the subsistence level where a variety of crops are grown for home consumption; main crops include pigeon peas, corn, sweet potato, yam, dasheen, watermelon, sorrel, cucumber, and butternut squash. The high cost of crop production is attributed to the relatively high cost of inputs, limited labor availability and water scarcity. Carriacou accounts for one-third of the livestock population of Grenada, and in the past, livestock was exported to Grenada and Trinidad. Over the last decade, there has been a shift, with fewer cattle raised with more of an emphasis of rearing small stock such as goats, sheep, and pigs. Notwithstanding, agriculture remains intimately involved in the fabric of the island's society and way of life.

**Policy and legal context:** There are several key policy frameworks and legislative instruments that are relevant to this project. The National Sustainable Development Plan (NSDP) 2019[8]<sup>7</sup>, lays out strategic priorities to address crucial social, economic, environmental, and other development challenges to realize Vision 2035. Of relevance is Goal 3: Environmental Sustainability and Security, and Outcome 7: 'Climate Resilience and Hazard Risk Reduction' where the proposed national strategic actions include creation of more green spaces and promote environmentally friendly practices across Grenada, Carriacou, and Petite Martinique, the implementation of an annual tree-planting programme across the Tri-island State, mainstream climate-smart agricultural, soil, and water conservation practices. It should be noted that Outcome 3 of the NSDP considers gender sensitivities in building resilient, inclusive and peaceful communities.

The Grenada National Land Policy (2016)[9]<sup>8</sup> prescribes measures that the government intends to implement to ensure that the country's land and natural resources are soundly managed, and that the

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resilience of ecosystems (threatened by climate change and human activities) is enhanced through sound management practices. Specifically, the Policy aims to (i) establish the framework for sustainable, productive and equitable development, management and use of land and natural resources, (ii) establish the legal and administrative framework to support sound and sustainable management of the land, terrestrial and coastal natural resources, (iii) establish the information system to support land and natural resource management and (iv) establish the jurisdictional responsibilities and functions of the Ministry responsible for land, environment and natural resources.

The Grenada National Agricultural Plan 2015-2030 (2015)[10]<sup>9</sup> Strategic Objective 3.1 is relevant to this project that aims to build climate resilience to avoid, prevent, or minimize climate change impacts on agriculture (including forestry and fisheries), the environment and biodiversity, improve preparedness for climate change impacts and extreme events, enhance the country's response capacity in case of extremes and facilitate recovery from impacts and extremes. The recommended strategy is to promote sustainable agriculture practices, strengthen promotion of and support for more efficient water management and conservation measures (including terracing, drainage, mulching, storage, use of rainwater harvesting systems and water use-efficient systems).

The Revised Forest Policy for Grenada, Carriacou and Petite Martinique (2018)[11]<sup>10</sup> references objective 4 that seeks to maintain, enhance and restore the ability of forests to provide goods and services on a sustainable basis, emphasizing co-management approaches. Relevant policy directives point to (i) tree establishment and management to reduce soil erosion, improve soil fertility, beautify the environment, provide timber and non-timber forest products (NTFPs) and maintain biodiversity in urban and rural areas, (ii) promote sustainable management of dry forest ecosystems, (iii) promote recreation and eco-tourism that sustainably manages, enhances and diversifies recreational and touristic uses of forests, and (iv) implement best practices to improve watershed management, protect, manage and restore critical watersheds as needed and ensure effective collaboration and partnerships for watershed management.

Key relevant legislative instruments to the issue of land degradation in Grenada include the Physical Planning Act (2016) and National Building Code (2016). This is the most expansive land-related statute however, the focus is on regulating physical development through a permitting process, compliance with building standards, and the development of National and Local Area Development Plans which seek to define the type of development that is to be undertaken in any location. The Forest, Soil and Water Conservation Act (Cap 116) makes provision for the conservation of the forest, soil, water and other natural resources of Grenada. Its main objective is to prevent flooding and soil erosion and makes provisions for the prevention of squatting. There is an overlap between the Act and the Physical Planning Act in regard to the jurisdiction over the declaration of crown lands as forest reserves and private lands as protected forest subject to special protection.

In 2014 the Government of Grenada adopted a National Gender Equality Policy and Action Plan (GEPAP) 2014 ? 2024[12]<sup>11</sup> which defines the framework toward attaining gender equity and equality in the country. The GEPAP presents the ten priority policy areas that includes Policy Area 4 on Agriculture and Tourism. GEPAP based its policy recommendations and actions on key findings of the background study that pointed toward challenges in occupational segregation, disparities in income earning, and disparities in access to loans for investment. It concluded that governmental and other agricultural agencies are largely unaware of the gender dimensions of in the agriculture sector. Through the GEPAP the Government will commit to promoting gender equality in the sector and its importance in facilitating agricultural diversification, food security, economic growth, poverty reduction, and sustainable development. This is underpinned by key actions that include; (i) building awareness to break perceptions that relegates agriculture to marginal groups, (ii) widen engagement and empowerment of male and female farmers in restructuring the agricultural sector, (iii) address the challenge of women's

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ownership of land/property and access to credit, (iv) promote women's equal access to leadership and decision making, and (v) ensure that sectoral development is informed by sex-disaggregated data.

**Threats/Root Causes:** Decline in the acreage under agricultural production (34% in 2001 to 27% by 2012) has been attributed to land degradation and erosion that has made it increasingly difficult to maintain agricultural production, along with concomitant impacts on household incomes and living conditions. Land degradation, caused primarily through inappropriate land use practices, as well as clearance of primary forest, cultivation on steep slopes, soil compaction by livestock, the impact of bush fires, increased run-off and soil erosion have been noted as root causes in adversely affecting agricultural productivity. The impact of drought, in the absence of mitigation and adaptation measures, magnifies the long-term adverse impacts of environmental deterioration not just on the island's ecosystem but also on households that depend in part on agriculture for their livelihoods (Cashman and Yawson, 2019). In total over 1,800 ha of land is estimated to be affected by water erosion. The main land use categories affected are shrub/grasslands and pasture and grazing lands. Areas at Belle Vue South area in Belmont exhibit significant soil erosion.[13]<sup>12</sup> The underlying threats contributing to land degradation and biodiversity loss in the Carriacou are all interlinked and discussed below.

*Deforestation:* To support traditional boat building and agricultural activities and livestock rearing, the removal of tree cover has been a long-practiced. This has led to the destruction of terrestrial ecosystems and impairment of watershed functioning, resulting in increasing erosion and loss of fertile land, as well as contributing to the increased prevalence of drought conditions[14]<sup>13</sup>. The loss of vegetation cover in areas including Belle Vue South, Dumfries and Six Roads, has resulted in impairment of runoff attenuation functions within the impacted drainage basin areas, increasing downstream flood risk potential, as dislocated soil is translocated to lowland areas during heavy rainfall reducing hydraulic capacities of drainage channels. Loss of topsoil has led to degraded productivity of the ecosystem and impairment of natural regeneration, resulting in changing vegetation communities, typically with limited ability to reclaim soil productivity. Overall, impoverishment of the land and depletion of soil has led to reduced productive yields and loss of biodiversity. [\(refer to the Baseline Report Annex U2\).](#)

*Inappropriate agricultural practices and overgrazing:* On Carriacou land degradation is exacerbated by poor soil management, poor agricultural practices accelerated by indiscriminate use of synthetic herbicides, pesticides and fertilizers, and the slash and burn approach to clearing land for cultivation. On the island, livestock rearing is engrained in the social and economic fabric of the society; a practice that has sustained over generations. With increasing local and external demands for livestock products over the years, this has resulted in rapid growth of the livestock industry. This in turn has resulted in herd overstocking which pushed the carrying capacity of some of the farmers' pastures beyond manageable limits, forcing livestock owners to let their animals roam freely especially in the dry season from January to May when forage becomes scarce, in a traditional practice called 'leggo' (let loose). The high density of livestock per unit area invariably leads to significant overgrazing, where regeneration of vegetation is prevented as seedlings and young plants are continually grazed back, perpetuating the cycle of soil erosion. This has also resulted in social and economic problems through inter-alia, damage to crops and consequent loss of income to farmers and stymieing growth of other agricultural enterprises as they cannot be protected from free-roaming animals. In extreme cases, frustrated landowners resort to inhumane and economically disastrous practices of injuring roaming animals or killing them, resulting in confrontation among residents. Predation by dogs within unsecured areas are ongoing issues that need to be addressed as a community. The main land use categories affected by overgrazing are shrubs/grassland and pasture/grazing lands[15]<sup>14</sup>. [Refer to the Baseline Report; Annex U2.](#)

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**Figure 1.** Typical land degradation in Carriacou due to overgrazing and gully erosion[16]<sup>15</sup>

*Climate variability and climate change:* These influences are already negatively affecting water availability, in particular, with inter-related effects across the local economy; these include extreme hydrological events, such as hurricanes, storms and unseasonal rainfall and drought events[17]<sup>16</sup>. Cashman and Yawson (2019) cited modelling research on the impact of climate change and variability on water availability under the project Sustainable Water Management under Climate Change in Small Island Developing States of the Caribbean carried out by the University of the West Indies-CERMES. The results of the hydrological modelling show an increasingly negative water balance for Carriacou, driven by declines in rainfall and increases in potential evaporation due to temperature increases. Total water yield was modelled to decrease by up to 53%, depending on the climate scenario. The annual shallow aquifer recharge was estimated to decrease by between 13% and 45%. For all scenarios, water yield decrease was estimated to be particularly pronounced between September and November, with daily mean water yield modelled to decrease by between 58% and 72%. Extreme flow events will likely be short-duration and spatially small in extent, resulting in increased erosion with periods of drought forecast to become more frequent and extreme. These climate change forecasts will have dire consequences for agricultural production and livelihoods and socio-economic stability, more so if the challenges of land degradation remain unaddressed.

The *long-term problem* is that left unchecked, land degradation in Carriacou will continue to negatively impact the productive capacity of landscapes, through soil loss, increasing aridity, enhanced fire risk and loss of biodiversity including micro-biology critical for nutrient cycling. This in turn will reduce the capacity of residents to sustain investments in agriculture and other forms of economic activities that are reliant on maintaining the integrity of terrestrial ecosystem services. In addition, the problem of land degradation on the island will reduce its resiliency to withstand anticipated increases in frequency and intensity of climate change influences. In the long term, this will have compromise the opportunity for

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realizing diversified and sustainable livelihoods and a stable local economy. This is against the important backdrop that in Carriacou there are relatively limited alternative economic opportunities, hence driving the high reliance on the natural resources as the basis for sustaining livelihoods of the population.

The *long-term solution* to address land degradation and degradation of ecosystem services in Carriacou is to strengthen capacities of relevant government and non-government stakeholders so that they may effectively empower farmers and local communities to adopt and implement sustainable land management practices that restore productive landscapes and maintain ecosystems functioning. With restoration of ecosystem functioning, productive landscapes will revert to a condition of improved soil nutrient supply capacity, improved hydrological balance and improved habitat quality for globally significant biodiversity. The project restoration activities will be focused in two adjoining areas on Carriacou, specifically Bellevue South and Dumfires that have undergone significant land degradation but retain high importance in terms of strategic agricultural and food security for the island. The project will extend good practices for sustainable land management over wider landscapes on the island.

Barriers: There are two key barriers that need to be addressed in tackling the problems of land degradation in Carriacou, that otherwise prevent uptake and implementation of SLM practices and ecosystem restoration to reduce drivers of land degradation. Addressing these two key barriers are the focus of the two project components.

**Barrier 1: Lack of demonstrable models and field capacities that demonstrate effective and sustainable landscape restoration and climate-resilient solutions that incorporate ecosystems-based (EbA) approaches that can be replicated across the island.** Restoration of landscapes on a sustainable basis requires the availability of capacity to generate planting material, and the island currently lacks a propagation facility for continuous production of seedlings that will be required by the project and post-project in the mid to long-term. A significant constraint however to ensuring field plantings remain viable after establishment is the ability to retain on-site moisture and water availability particularly given prevailing arid conditions during the dry season. While surface water retention structures have been installed across the island for livestock watering, there has not been an organized approach to artificially recharge degraded landscapes that have been identified for priority restoration. Further, investments are needed to bring water to locations where required at restoration sites. In addition, there has been relatively limited in-field practice and demonstration in on-site water retention measures in degraded landscapes that employs combinations of drainage diversion techniques, planting and mulching (including use of composted green and animal waste). There is limited adoption of climate smart agricultural practices that would otherwise enhance productivity and allow expansion to include new crops. There also has been insufficient transfer of approaches and innovation in use native species that are drought tolerant/low-water requirements that may be useful in restoration efforts. Capacity constraints also extend to limited support in demonstrating best practice approaches in reducing translocation of fertiliser and pesticide residues in surface runoff that may not only pollute receiving environments but result in high costs of inputs through inefficient use. A significant factor that also contributes to this overall barrier is the recurring loss of plant regeneration due to unrestrained livestock grazing particularly during the ?leggo? season. The challenge of managing livestock has been difficult and requires community engagement and cooperation to reduce losses to crops and newly established planting.

**Barrier 2: Inadequate local governance, coordination, limited capacity and awareness among farmers and community that support adoption and effective implementation of SLM and EbA restoration practices.** Although farmers and landowners have been supported by agricultural and forestry extension staff, there has not yet been a consolidation of specific best management practices that are location-specific for the work that needs to be done at the project target sites, and by extension over the rest of the

island. Technical resource materials that have been developed on successful approaches and tools that can be applicable in Carriacou are still not readily accessible by the community of farmers, livestock owners and other stakeholders. The level of public awareness on the impacts of land degradation and the compounding threats of climate change to long-term livelihood remains relatively low and is insufficient to trigger behavioural change in how the landscape is managed in cropping and livestock system management. Where education programmes have commenced, these remain un-sustained, and there is continued need to provide support to build capacities among local technical personnel and educators, community groups who in turn can help build capacities among beneficiaries such as those in the farming community. There can be a lack of sufficient community involvement with organizations working in Carriacou if the targeted communities do not become involved at all stages of project interventions and that due consideration is not given to needs assessment, implementation modalities, monitoring, and evaluation. Because of the small size of the communities, absence of their effective involvement becomes a barrier not only to project implementation but in sustainability in uptake of knowledge and application post-project. A key underpinning to the challenges in Carriacou is the there is no well-defined coordinated approach to integrate sustainable land management at a landscape level that can guide the work of government organizations and other entities working with farmers, livestock owners and the wider community to realize SLM. Closely related is the challenge of uncontrolled grazing due to the fact that there are no community-based protocols for savannah grass land management that can guide livestock owners and local communities in how herds are managed.

## 2. Baseline scenario and associated baseline projects

*Baseline - Government investments:* The Government of Grenada through the Ministry of Agriculture and Lands, Fisheries & Cooperatives aims to expand food production in an effort to achieve some measure of food security, reduce the growing food import bill and generate foreign exchange in order to enhance incomes and livelihoods of the farming communities.

The baseline scenario regarding land degradation in Grenada and Carriacou shows a concerted effort by the government to address land management issues. The preparation of a *National Physical Development Plan and National Land Policy* over the past few years have provided the basic elements necessary to assess national conditions and to implement sustainable land management approaches. Other important baseline activities have included the preparation of the *National Action Programme (NAP) Alignment* under UNCCD[18]<sup>17</sup> as part of the Government's commitment for sustainable land management, and the preparation of *Grenada's Land Degradation Neutrality Targets (LDN-TSP)* under the UNCCD, as part of the Government's commitment for sustainable land management (this activity started in 2016 and was concluded in 2018). Grenada was also one of the few SIDs that prepared a *National Drought Management Plan*. This plan gives special focus to Carriacou because of its limited water supply and negative impacts of drought on livelihoods. There is increasing appreciation of the importance of Sustainable Land Management to national development, the recent preparation of the *National Land Policy* is indicative of this trend, the effort supported through the OECS Technical Assistance for the Establishment of National Land Policies. Part of the assistance also involved the integration of sustainable land management components into the *Draft Land Management and Natural Resources Bill*. The National Land Policy recommends that the Government shall complete the preparation of the National Physical Development Plan within two years and be laid in Parliament.

The Government, through the Agricultural Division in the Ministry of Carriacou and Petite Martinique Affairs has been supporting farmers on Carriacou to bolster food production in the wake of the impacts

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of the COVID-19 pandemic. Production has been boosted on the three government-operated farms on the island to provide seedlings to farmers and residents with emphasis on backyard gardening as a means of food security. The Division of Agriculture has secured a new plough tractor through assistance of the People's Republic of China and it continues to run its 4H Programme throughout most schools on the island focusing on practical agriculture and life skills, as well as providing incentive support under its *Food Security Initiative Programme*<sup>[19]<sup>18</sup></sup>. The Government of Grenada and allied national agencies in Carriacou spends roughly US\$630,000 annually under baseline actions, which is expected to continue over the course of the project in the joint environmental management and agricultural sectors.

*Baseline - donor and partner assistance programmes:* The proposed project will build on the experiences and lessons learned from two recently completed projects in Grenada with work done also in Carriacou. One of these was the Land Degradation Neutrality (LDN) Target Setting Programme, (TSP) which is being implemented through the Global Mechanism (GM) and the Secretariat of the UNCCD, in collaboration with multiple international partners. The LDN/TSP process in which Grenada undertook, was the vehicle used by the COP/UNCCD for driving the linkage of the Convention to the SDGs in general, and more specifically to target SDG 15.3, while contributing to the achievement of multiple SDGs, related to climate change mitigation and adaptation, biodiversity conservation, food and water security, disaster risk reduction, and poverty reduction. The other initiative is a Government of Morocco-funded Caribbean Soil Fertility Project. This project enhanced Grenada's capacity to manage soil fertility, by establishing a database and developing a sound soil information system to speedily and effectively respond to country needs and demand for fertilizers.

The *Climate Smart Agriculture and Rural Enterprise Programme (SAEP)*<sup>[20]<sup>19</sup></sup> is a six-year programme (2018-2024). This program is being funded by the International Fund for Agriculture Development (IFAD), the Caribbean Development Bank (CDB) and the Government of Grenada. The SEAP focuses on assisting beneficiaries improve their livelihoods through skills training, investments in agriculture, teaching Climate Smart Agricultural (CSA) practices and providing business skills training and technical services to rural enterprises in the rural communities across the country including Carriacou. This project will build on the CSA awareness, extension support, training in climate change and climate-smart agriculture and financing for CSA initiatives. The programme has specific focus on gender and youth empowerment.

The *Integrated Climate Change Adaptation Strategies (ICCAS) in Grenada Project* (2013 to 2019)<sup>[21]<sup>20</sup></sup> aimed to increase resilience of vulnerable communities and ecosystems to climate change risks in Grenada through integrated adaptation approaches. The project, funded by the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) under its International Climate Initiative (IKI) was a collaboration between the Ministry of Agriculture and Lands, Fisheries & Cooperatives, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the United Nations Development Programme (UNDP). The project supported communities around Grenada, Carriacou and Petite Martinique to adapt to the challenges created by climate change. In Carriacou assistance was provided to Bishop's College for enhancing climate change resilience and flood mitigation, the Carriacou 4H Club for a nursery/propagation station and for refurbishment of community water catchments (Top Hill and Limlair).

This project will build on a recently approved *GEF-funded project Caribbean Small Island Developing States (SIDS) Multicountry Soil Management Initiative for Integrated Landscape Restoration and Sustainable Food Systems: Phase 1* (CSIDS-SOILCARE Phase 1). The CSIDS-SOILCARE project will coordinate efforts with this project to ensure that the capacity building programmes of each project will strengthen each other, and that knowledge acquired can be effectively disseminated to broader audiences. It is important to note that the Executing Agency of the CSIDS-SOILCARE project, the Partnership Initiative on Sustainable Land Management (PISLM), will leverage experience gained and knowledge networks built, in application to this project (as the proposed Executing Agency).

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3. the proposed alternative scenario, gef focal area[22] strategies, with a brief description of

expected outcomes and components of the project

***Project Overview:*** The GEF's incremental funding and co-financing resources will be used to overcome the identified barriers that Carriacou faces in respect to addressing acute land degradation that poses a long-range threat to maintaining integrity of ecosystems and livelihoods of resident communities. The project seeks as its objective to effectively address land degradation in Carriacou, through demonstration and application of ecosystems-based landscape restoration, sustainable land management and good agricultural practices, using community participatory approaches that expands diversification and sustainability of livelihoods options.

Investment under **Component 1** will address physical on-site restoration of degraded landscapes primarily in the southern part of Carriacou, while investment under **Component 2** will build the needed governance mechanism and capacities among all relevant stakeholders to effectively transform landscape restoration tools and methodologies into improved practice over wider landscapes on the island. Carriacou is a micro-scale landscape that is already highly vulnerable to the influences of climate change and based on anecdotal observations over recent decades, supported by climate model research for the Caribbean, suggest that the local environment could see further degradation with ecosystems and livelihoods significantly compromised, if poor land management practices are not addressed. The work is well aligned with Grenada's UNCCD National Action Plan and voluntary Land Degradation Neutrality (LDN) targets.

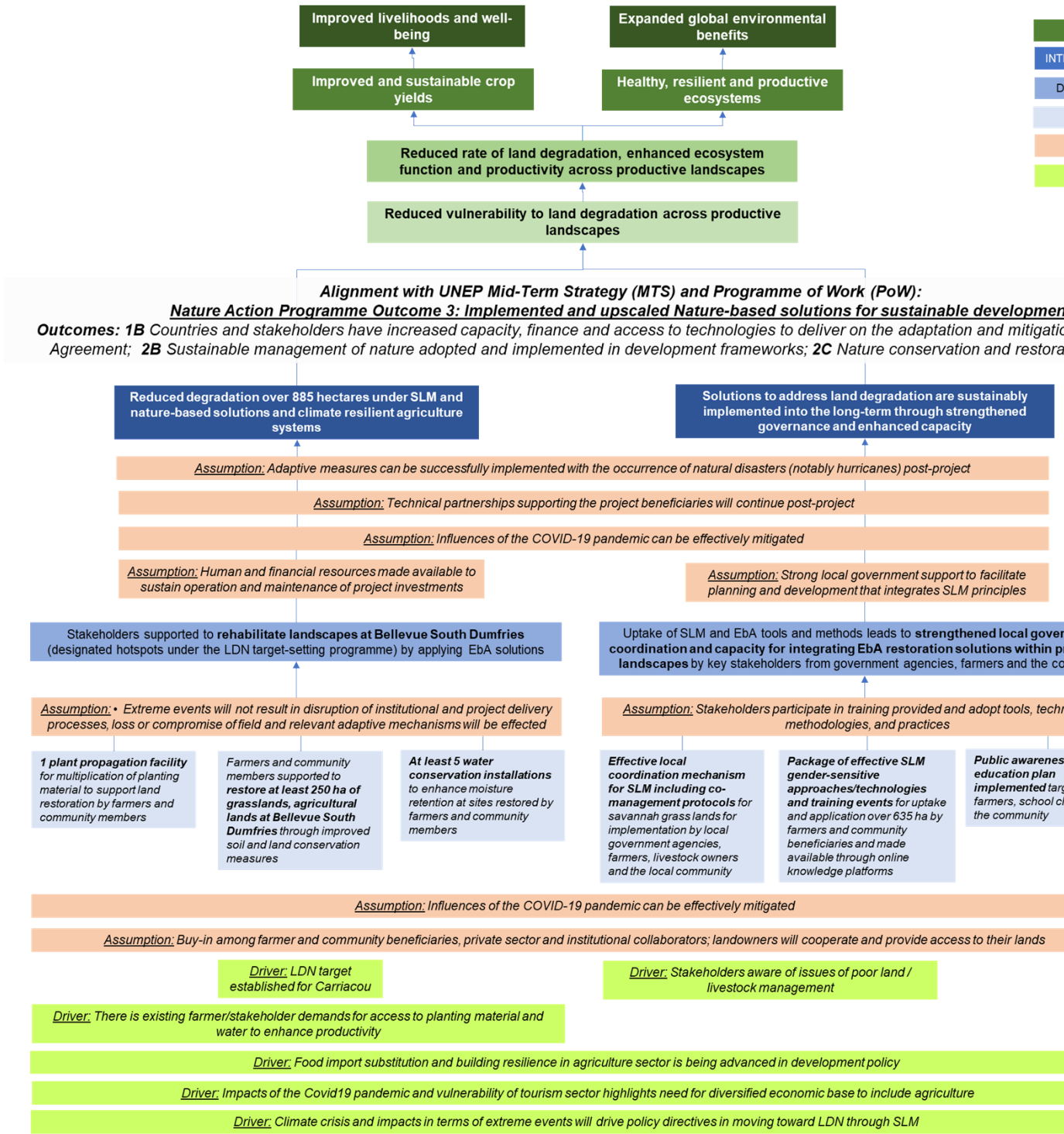
The project will directly contribute to the wider strategic national commitments on addressing land degradation as articulated in the national LDN voluntary Target Setting Programme, (TSP) which seeks to rehabilitate some 383 ha of degraded land at Bellevue South in Carriacou by 2030, where it is estimated that 1,800 hectares are affected by water erosion as a result of poor land management practices. The project will support efforts to strengthen institutional and stakeholder engagement through improved governance mechanisms for SLM on Carriacou within the scope of the UNCCD NAP objectives. the activities of this project are also aligned to the goals of CSIDS-SOILCARE Phase 1 and would ensure that Carriacou is well-positioned to participate in the Caribbean LDN Transformative Project.

The project resources will help empower targeted communities with the means to meaningfully and effectively participate at all stages of project development and implementation through identification of the challenges they face and finding appropriate solutions toward accrual of tangible benefits. The project will help further strengthen collaborative co-management partnership agreements among the cross-section of stakeholders including *inter alia*, government institutions, farmers, private sector, NGOs, CBOs, youth groups and wider civil society. The project contributions to investments in SLM, climate-smart agriculture and improved livestock management will help efforts to build back the national economy in the wake of the COVID19 pandemic.

The project is aligned to UNEP's 2022-2025 Medium Term Strategy (MTS) and Programme of Work (PoW) where it will contribute to the Nature Action Programme Outcome 3 *Implemented and upscaled Nature-based solutions for sustainable development*. The specific MTS Outcomes of relevance are **1B** 'Countries and stakeholders have increased capacity, finance and access to technologies to deliver on the adaptation and mitigation goals of the Paris Agreement?; **2B** 'Sustainable management of nature adopted and implemented in development frameworks?; and **2C** 'Nature conservation and restoration are enhanced?. The key associated direct outcome is **2.3** 'Productive land- and seascapes and freshwater ecosystems are sustainably managed?. This project will fall under the *Conservation, Restoration and*

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*Sustainable Use of Biodiversity* Programme Coordination Project (PCP) and will be contributory to other Caribbean SIDS projects within the ambit of the PCP, with close alignment with projects GEF ID: 9978 *Strengthening Resilience of Agricultural Lands and Forests in Dominica in the Aftermath of Hurricane Maria* and GEF ID: 9667 *Sustainable Land Management in the Commonwealth of Dominica* given that the Implementing Partner is also the PISLM.



### Causal pathway 1

**Barrier Cluster 1: Lack of demonstrable models and field capacities that demonstrate effective and sustainable landscape restoration and climate-resilient solutions that incorporate ecosystems-based (EbA) approaches that can be replicated across the island**

- Limited ability to retain on-site moisture in prevailing arid conditions during the dry season
- Lack of adoption of climate smart agricultural practices
- Insufficient transfer of approaches/innovation in use of drought tolerant/low-water native species for restoration
- Limited support in demonstrating best practice approaches in reducing fertiliser and pesticide runoff
- Limited ability to contain overgrazing due to unrestrained livestock herding.

### Causal pathway 2

**Barrier Cluster 2: Inadequate local governance, coordination, limited capacity and awareness among farmers and community that support adoption and effective implementation of SLM and EbA restoration practices.**

- Unavailability of successful approaches and tools on SLM and CSA for use by farmers, livestock owners and other stakeholders.
- Low level of awareness on impacts of land degradation and compounding threats of change on livelihoods
- Limited community involvement on SLM approaches
- Lack of defined approach to integrate sustainable land management at a landscape level
- No community-based protocols for savannah grass land management

**Figure 2.** Project theory of change

**Component 1: Community-Based Landscape Rehabilitation and Protection using EbA approaches.**

This component will focus on implementing restoration on severely degraded areas on the island to reduce further loss of ecosystem services to realize.

**Outcome 1.1 Stakeholders supported to rehabilitate landscapes at Bellevue South Dumfries (designated hotspots under the LDN target-setting programme) by applying EbA solutions.**

**Output 1.1.1: One plant propagation facility for multiplication of planting material to support land restoration by farmers and community members.**

The project will support the establishment of a plant propagation station, to support restoration efforts. The nursery will target plants which are indigenous to the island, resilient to drought and relatively fast-growing, as well as fruit trees and other plants in demand by the local community. The facility will be outfitted with solar generation equipment to reduce cost of operation and contribute to reducing the carbon footprint from use of conventional power supplies. The facility will employ best-practice water use efficiency methods and low-chemical use with limited runoff to the ambient environment. The facility will be constructed using methods that will ensure resilience to impacts tropical storm exposure. The facility will be managed under a co-management framework under the oversight of a multi-stakeholder board<sup>[23]</sup><sup>22</sup> in partnership with the Carriacou Farmers Association (a local NGO), with the PISLM providing initial project management and administrative functions, with clear administrative linkages to the Ministry of Carriacou and Petite Martinique Affairs.

Dumfries will be the site for the establishment of the propagation station (Annex E) as Dumfries currently supports a cluster of about 12 farmers. To enhance sustainability of the investment, planting material will be made available for sale to residents. In the early stages of project start-up, a *temporary ?flying nursery? will be established* where project personnel will have responsibility for gathering seedlings from wild sources for the initial propagation that will be eventually transferred to the facility when completed. During the early execution of this project *scope of work, design specifications along with a cost estimate* will be developed.

The PISLM Research, Advisory and Capacity Facility on New Adaptation Technology (RAC/NAT Facility) will carry out an assessment to determine the most suitable type of propagation facility,<sup>[24]</sup><sup>23</sup> its productive capacity requirements, and the associated ancillary facilities needed for effective and efficient operation and conduct an *evaluation of customer?s needs*, new and emerging trends for agricultural products, and high value niche crops to inform the priority plants propagated at the facility. The RAC/NAT Facility will develop and implement the *marketing strategy* for the new plant

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propagation facility in collaboration with the Ministry of Carriacou and Petit Martinique Affairs. Based on the total number of farmers and anticipated clients the RAC/NAT Facility will construct the approved plant propagation facility by the third quarter of year 1. The *propagation facility will be designed to include an 18 x 6 m stockpiling and medium preparation room and, a 30 x 10 m potting area and a 15 x 30 m hardening area with an expectant production capacity of 36,000 seedlings annually* when fully operational. Adjacent ancillary facilities will include an office and washroom facilities. The facility will incorporate design elements to enhance resilience to storms, capture rainwater and use solar energy for power needs associated with irrigation delivery. The construction of the facility will employ Occupational Health and Safety (OHS) standards and measures to mitigate accidental chemical discharges to the environment will be a feature of the facility that will be specified in a *Maintenance Plan*. Finally, in the establishment of both the flying nurseries and the main propagation facility, there will be need for organic matter to enrich the rooting/seeding medium. The project will utilize green waste generated from hotels, restaurants, schools and households that can be composted with the soil for propagating the seedlings. *Training will be delivered to the Carriacou-based nursery operators* by the agricultural expert, supported by Ministry of Agriculture personnel based on the specifications outlined in the nursery maintenance plan. **Refer to the Baseline Report; Annex U2.**

**Output 1.1.2: Farmers and community members supported to restore at least 250 ha of grasslands, agricultural lands at Bellevue South Dumfries through improved soil and land conservation measures**

Consistent with ecosystem-based approaches and green/nature-based solutions, this output will transform the degraded targeted areas (250 ha) of Bellevue South Dumfries into more productive and resilient agricultural and coastal forest ecosystems using technical and local knowledge, and lessons learned from similar environments, particularly in other SIDS. An Agriculture and Land Management Consultant will carry out a detailed *assessment of the land degradation drivers* and other biophysical factors driving land degradation in Bellvue South/Dumfries. The assessment will be used *to develop a comprehensive restoration management plan* which will be implemented by the Ministry of Agriculture and Lands, Fisheries & Cooperatives in collaboration with the PISLM RAC/NAT Facility. An overall consideration in design of approaches is that livelihood options are preserved and expanded and/or diversified via potential new opportunities afforded by the restoration efforts.

The project will invest in a variety of options in vegetation restoration tailored to agricultural systems in terms of integration of multi-crop systems that will conserve soil and water and enhance and maintain soil fertility. Some of the specific soil conservation measures to be applied will include *installation of contour drainage along the to reduce erosive channelized flows and retain moisture, with check-dams, other live vegetation ?fences? and bio-engineered solutions to arrest soil movement.*

The project will invest in watershed-specific protection measures that include augmenting streambank vegetation to *expand buffers along watercourses* and reduce direct overland erosive runoff to watercourses. The project will also target degraded grasslands with *replanting of traditional (naturalized) plant species*, such as the ?Klein Grass? (*Panicum coloratum*).? An important consideration in the restoration effort will be measures to reduce livestock grazing on new plantings. This will be achieved through *selective fencing over sensitive landscape areas and installation of guards around the seedlings themselves*. Strategies for alternative forage and alignment of herding pathways will be introduced to divert animals away from sensitive areas.

The PISLM RAC/NAT Facility will collaborate with the Ministry of Agriculture and Lands, Fisheries & Cooperatives and the Ministry of Carriacou and Petit Martinique Affairs to conduct research on the restoration of traditional (naturalized) grass species. A traditional grass in a major communal pasture in the Brunswick area called ‘shenda grass’<sup>[25]<sup>24</sup> or Bermuda Grass (*Cynodon dactylon*) always regenerated with the onset of the seasonal rains. However, this has not happened since 1987. Over time, with increased uncontrolled livestock grazing, the pasture lands across the island have become almost barren. This project will reintroduce this grass species. Further, the RAC/NAT Facility will collaborate with the International Center for Tropical Agriculture (CIAT) and the Caribbean Agricultural Research and Development Institute (CARDI) to explore the introduction of drought resistant forage varieties common to the Eastern Caribbean such as Buffel Grass (*Cenchrus ciliaris*) and Brachiaria Grass (*Brachiaria spp.*). Refer to the Baseline Report; Annex U2.</sup>

**Output 1.1.3: Five water conservation installations to enhance moisture retention at sites restored by farmers and community members**

Based on estimates from the Ministry of Agriculture and Lands, Fisheries & Cooperatives, at least 3,000 m<sup>3</sup> per day of on-site water storage will be required to meet irrigation needs to service the plantings associated with the restoration efforts, as well as provide water for crop irrigation. A water resource management specialist will carry out an assessment to better understand the current and projected water resource requirements for irrigation and livestock needs in Carriacou and design specifications for the water conservation installations based on the results of a climate risk assessment; the approved designs will include estimate costs and procurement plan for establishment of the installations within the context of the project budget. The RAC/NAT Facility will carry out a validation of the climate risk screening (and vulnerability assessment) to inform the design of, and anticipated operation, and management of the investments. The Facility will also carry out a validation exercise of the environmental and social mitigation measures that will inform construction phase as well as a maintenance plan for the facility to safeguard the investment.

The project will contribute investments in water storage and conservation within the restoration area and will undertake the rehabilitation of concrete storage tanks at the Limlair Livestock Facility, the Belair Pond, the Mt Rouyal Cistern, the Limlair Pond and the Dumfries Catchment site.

**Table 1:** Status of agricultural water storage assets on Carriacou and required upgrades

Facility	Agricultural significance (high, medium, low, none)	No. of farmers served	Main upgrades required
Cistern Limlair Livestock Station	High	200+	? Minor repairs to surface ? Removal of vegetation ? Repairs to inlet and outlet ? Installation of solar pump



Belair Pond	Medium	20 to 30	? underground flexible tank technology
Mt Royal (Top Hill) Cistern	Medium	20 to 30	? Install pump and distribution system ? Fence and protect tank surface
Limlair Pond	High	50+	? underground flexible tank technology
Dumfries Catchments	High	20 to 30	? Minor repairs to structure ? Fencing ? Improved management ? Installation of solar pumps

Interventions will entail the *rehabilitation of concrete storage tanks* at the Limlair Livestock Facility, the Mt Royal (Top Hill) Cistern and the Dumfries Catchments. New catchment and storage systems and/or the introduction of an innovative *underground flexible tank technology* presently used in Trinidad and Tobago will be established at the Belair and Limlair Pond sites. The investment will also include the excavation of *diversion drains and at least two mini-dams* at strategic locations across the landscape that will impound surface flow for release via drains and irrigation works to locations at lower elevations. *Runoff diversion structures will be built on to roads* adjacent to the areas for restoration that will channel runoff to mini-dams. The immediate areas around the *mini-dams will be stabilized using bioengineering installations* such as geotex fabric and deep-rooted grasses and shrubs. The long-term upkeep and maintenance of the investments will be overseen and financed through recurrent budgets of the Ministry of Agriculture and Lands, Fisheries & Cooperatives and the Ministry of Carriacou and Petit Martinique Affairs (under its Division of Agriculture). *Training on maintenance of the water conservation installations* will be delivered to local users (the Carriacou Farmers Association) and personnel from the Division of Agriculture of the Ministry of Carriacou and Petit Martinique Affairs by the water resources specialist. [Refer to the Baseline Report; Annex U2.](#)

All relevant *data (non-spatial and spatial)* generated from the restoration work will be transmitted to the *Land Use Unit* in the Ministry of Agriculture and Lands, Fisheries & Cooperatives for consolidation with the existing database that forms part of Grenada Land Information System (GLIS). This will be referenced to the land degradation neutrality targets set by the country[26]<sup>25</sup>. Best practices and lessons learned under this component will be contributory to shaping other relevant interventions within the framework of the Grenada National Land Policy[27]<sup>26</sup>.



## **Component 2: Strengthening landscape governance for application of SLM and EbA tools**

This component focuses on enhancing the governance mechanism, capacities and knowledge of technical and policy support professionals, non-government and community-based organizations to influence behavioural change among beneficiaries.

***Outcome 2.1 Uptake of SLM and EbA tools and methods leads to strengthened local governance, coordination and capacity for integrating EbA restoration solutions within productive landscapes by key stakeholders from government agencies, farmers and the community.***

In support of the restoration measures to be achieved under Component 1, the project will address the underpinning challenge of the absence of a governance framework that coordinates and integrates actions of all actors and stakeholders that will ensure sustainability of investments in SLM in Carriacou. The recent Cabinet-approved National Land Policy and draft legislation will help to support activities to address some of Carriacou's land management issues. Additionally, capacity for scaling up solutions and innovation on application of ecosystems-based adaptation measures demonstrated under Component 1 will be enhanced at the local level, lessons learned feeding into wider knowledge and capacity building networks at the national, Caribbean regional and international level, specifically targeting SIDS.

***Output 2.1.1: Effective local coordination mechanism for SLM including co-management protocols for savannah grass lands for implementation by local government agencies, farmers, livestock owners and the local community.***

An effective and culturally appropriate governance mechanism is central to a strong enabling environment for SLM. Such arrangements are required to address challenges associated with mainstreaming SLM and LDN, coordinate fragmented agencies towards increased efficiency, and remove constraints related to insecure land tenure and access (UNCCD/Science Policy Interface, 2019). Moreover, inclusive land governance<sup>[28]<sup>27</sup></sup> is viewed as a critical cross-cutting element for shaping an enabling environment that steers land decisions and practices towards sustainability (UNCCD/Science Policy Interface, 2019).

An important element of the proposed project is the need to formulate, in consultation with national and local stakeholders, an approach for an optimal local governance mechanism in Carriacou to enhance SLM, that is nested within the existing national framework. As such, a *Carriacou Land Management Committee will be established as a sub-committee of the National LDN Committee*, which oversees Grenada's SLM issues and programmes. The LDN Committee is comprised of the UNCCD Focal Point, a representative from: (i) Department of Agriculture, (ii) Department of Forestry, (iii) Department of Planning, (iv) CBD Focal Point, (v) UNFCCC Focal Point and (vi) a representative from Ministry of Carriacou and Petit Martinique Affairs. The proposed local governance arrangements will be instrumental in driving the SLM and LDN Programme within Carriacou. This local mechanism will be instrumental in mobilizing stakeholder ownership and management of the project deliverables (e.g., the propagation facility and water conservation installations), while also defining an *effective exit and sustainability strategy on project completion*. This will address a typical deficiency observed in many projects, where the sustainability of the outputs is not sustained once funded has ended. The management objective is to build on the work of the Project Steering Committee, which is expected to evolve into this formal mechanism once the project ends.

Given the severity and urgency in addressing land degradation caused by uncontrolled grazing, co-management protocols for savannah grass lands will be developed for collective implementation among livestock owners and local communities. Some 15 farms which are mainly reliant on ruminant farming, mainly located in Bellevue South Dumfries, will be the focus of this work and will continue to build on

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prior efforts in a learning approach to distil ideas that have shown promise and are feasible in reducing land degradation. To advance this work, a Gender and Social Management Specialist will be recruited. The consultant will collaborate with the Agriculture and Land Management Specialist, the RAC/NAT Facility and other personnel in the Project Management Unit to carry out the following:

- Gain an understanding of the economic, social cultural and gender dimensions surrounding livestock rearing on the island and identify those factors leading to environmental and social stress points. The livestock production in terms of recruitment rates versus carrying capacity will need to be assessed.
- Prepare a *gender-responsive community engagement plan* based on a detailed stakeholder and gender analysis, to include considerations of land and resource access, decision making roles and gender-based vulnerabilities.
- Develop an initial *framework for a co-management agreement for sustainable livestock management* to be validated and finalized during project implementation.
- Explore and make *recommendations on potential opportunities for integration of agriculture and ecotourism sectors* in enhancing sustainable resource use and identify opportunities for private sector engagement.

***Output 2.1.2: Package of gender-sensitive SLM approaches /technologies and training events for uptake and application over 635 ha by farmers and community beneficiaries and made available through online knowledge platforms.***

The project will seek to build on and learn lessons from the CSIDS ? SOILCARE Phase 1 project to develop a *package of gender-sensitive SLM approaches, technologies and training events* for uptake and application by at least 750 farmers and community beneficiaries. The PISLM Research, Advisory and Capacity Building Facility on New Adaptation Technologies (RAC/NAT Facility) will coordinate and manage the development of this package. This package will take the form of best practice guidance manual(s) in hardcopy and in electronic formats designed for easy dissemination in print and web platforms, including the PISLM SOILCARE Knowledge Hub.

During execution of the restoration work, the progress and lessons learned will be carefully documented to be used in updates to the guidelines and best practice. The project will generate at least *eight (8) best practice guidelines* that will be the basis for the capacity building work. On Carriacou it is estimated that between 400 and 800 hectares are under relatively intensive land use and are subject to varying degrees of land degradation, hence application of SLM approaches will be tested over this wider area through programmes to be conducted by the Ministry of Carriacou and Petit Martinique Affairs with the support of the RAC/NAT Facility. These may be semi-urban areas where there is accelerated erosion, e.g. along roads, quarries where other land owners besides farmers and livestock owners may be engaged. The RAC/NAT Facility will *validate the guidance methodologies and test applicability across the rest of the island* within environments beyond the targeted restoration area.

Training content will be structured along thematic lines to include land preparation, slope/soil stabilization, runoff control, drainage and irrigation, pasture restoration, climate-smart agriculture, pollution control among others. The content will be derived from documented best practices from Grenada and other parts of the Caribbean and across the globe that is relevant and applicable to Carriacou. Using a Train-the-Trainer methodology, *approximately 50 government staff and leaders within the farming community (extension officers, technicians, community leaders) will be trained in the utilization of SLM techniques and technologies*. One of the requirements for their participation is to train other beneficiaries (schools, farmers, farmers? groups, interested stakeholders from the community). In the extended training it is expected that *at least 750 beneficiaries from the farming community and community stakeholders will be trained, achieving a balanced gender ratio*.

Training will also be carried out on environmental monitoring, and application of tools and methods for land degradation assessment. Training will be delivered by the RAC/NAT in collaboration with the Ministry of Agriculture extension staff and other affiliate organizations associated with the project notably, the Inter-American Institute for Cooperation on Agriculture (IICA), Caribbean Agricultural Research and Development Institute (CARDI) and UWI. Learning will follow a longitudinal approach over the life cycle

of the project depending on the needs determined. All relevant training will be done in person to foster more stewardship and acceptance of the topics under consideration.

In the Commonwealth of Dominica, the PISLM has contracted the services of IICA and is currently executing a sustainable land management project which looks, in part at the various methods and approaches that can be employed to address land degradation on slopes in the areas of agriculture, forestry and watershed management. In doing so, they are engaging many farmers and communities across the island to showcase and train farmers in these approaches. This presents an opportunity for collaboration and knowledge sharing across the two geographical settings. Key resources that will be drawn on in development of the package will include the global SLM database hosted by World Overview of Conservation Approaches and Technologies (WOCAT) and or Trend.Earth.

**Output 2.1.3: Public awareness and education plan implemented targeting farmers, school children and the community**

To support the restorative activities and delivery of the technical capacity building activities a public awareness and public education (PA/PE) plan will be developed and implemented that targets farmer, NGOs, students, CBOs and the wider community will be developed and implemented around the themes of sustainable use of environmental and natural resources to include related topics *inter alia*, sustainable farming, grazing, forestry and land use practices. To drive the PA/PE a public awareness and education planning framework will be developed and will form the basis of a *project public awareness and public education plan*; the stakeholder analysis carried out in Component 1 will be used to inform who are the appropriate target audiences and the suitable of content per audience. The community-based education programme will be rolled out based on the directives under the PA/PE Plan. Ahead of the commencement of the PA/PE Plan rollout a Knowledge-Attitudes-Practices (KPA) survey of the community stakeholders will be carried out. This exercise will be repeated near the conclusion of the project to determine the effectiveness of the awareness raising programme in changing practice and behaviour.

The project will deliver education and awareness raising through a *community-based education programme*, guided by the PA/PE Plan, a series of *community meetings, media presentations, and visits to demonstration sites*. The project will build on the ongoing work of CSIDS ? SOILCARE Phase 1 work being carried out in Grenada, particularly in using electronic media, TV, radio and printed media to reach the general public. The awareness and education programme, anticipates the development of at least *10 separate core information products* on the topics previously mentioned for use by stakeholders. These include handbooks on the various SLM practices to be employed and training manuals developed in both hardcopy and electronic versions. These items will be hosted on the PISLM Knowledge Hub and various social media platforms like LinkedIn and Facebook so as to capture a wide range of audience.

The community-based education programme is expected to raise the awareness of the socioeconomic benefits to be derived from implementing effective SLM practices, including: 1) ecosystem services such as water provision and soil retention, as well as potential tourism revenues; 2) benefits to women, 3) raise awareness of sustainable land management, including organic agriculture; 4) restore traditional knowledge regarding land management and organic agricultural practices. **Refer to the Baseline Report; Annex U2.**

**Output 2.1.4. Gender Sensitive Monitoring and Evaluation Framework in Support of Project Implementation** will be put in place to ensure continual assessment of progress in meeting project outcome and output targets. The monitoring, evaluation and learning system will ensure full transparency of the project progress and performance against the results framework, and compliance with the established reporting and evaluation requirements (refer to Section 9 Monitoring and Evaluation).

4. Alignment with GEF focal area and/or Impact Program strategies

*Land Degradation Focal Areas LD-1-4 Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape; LD-2-5: Create enabling environments to support scaling up and mainstreaming of SLM and LDN:*

In alignment with FA LD-1-4, the project proposes to demonstrate appropriate innovative ecosystem-based approaches in controlling land degradation triggered by poor land management practices associated primarily with intensive crop production and livestock rearing in Carriacou, that are in alignment with the UNCCD National Action Plan for Grenada and associated voluntary Land Degradation Neutrality targets. The project will enhance local capacity to effectively replicate and upscale best practices demonstrated elsewhere on the island, in Grenada and similar environments in the Caribbean. Given that Carriacou a very small water-scarce island, its ecosystems and population are already particularly vulnerable to climate change influences, and the project expects to contribute to mitigating adverse outcomes from climate change in building resilience through landscape restoration. The project is in alignment with FA LD-2-5 through the enhancement of the national enabling framework for integrating the LDN target setting process within wider development frameworks of the country. In the case of Carriacou the challenge of land degradation has been well recognized at the national level and has been accorded national priority within the national LDN goals in the frame of the UNCCD Convention obligations. To translate this policy imperative via a supportive enabling framework, the project will cause the establishment of a sustainable land management mechanism for Carriacou that initially will be the role of the Project Steering Committee, that will eventually transition to a local Carriacou Land Management Committee as a sub-committee of the National LDN Committee. This will allow for mainstreaming of SLM and LDN in planning and practice at the local level but also assist with elevation to planning and decision making the national level.

5. incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCE, SCCF, and co-financing

Baseline	Incremental Cost
<p>Without the GEF investment land degradation situation in the project area in Carriacou will continue, with adverse outcomes in terms of maintaining the quality of the productive landscape and ecosystem services. There will continue to be limited adoption of sustainable management practices with unabated erosion, loss of land capability, declining forage quality for livestock with overgrazing, downstream pollution, sedimentation and increased flood risk in settlement areas during periods of heavy precipitation. In the longer term this will result in productive landscapes to becoming more marginal for agriculture and other uses particularly considering the compounding impacts of climate change in what is a highly vulnerable small island environment. This in turn will have impacts to sustainability of livelihoods not only in the agriculture sector but in other sectors such as in the hospitality and fisheries (near-shore) sectors and potentially lead to economic depression in the island over time.</p>	<p>The GEF investment will contribute to removal of the barriers that continue to persist in implementing solutions to address land degradation. This will be based on the design and installation of land and water conservation measures that are feasible and culturally acceptable for the small landscape context of Carriacou. The investment will support the expansion of the water supply capacity within the target restoration areas that will not only enhance sustainability of the landscape revegetation efforts, but also contribute to agricultural and livestock productivity that underpins the rationale for the investments. Tangible outcomes will ultimately lead to reduction in the volume of topsoil lost to surface erosion and sediment fluxes into rivers and receiving marine environments. The ecosystem-based field methods and tools will draw on best practices from other national interventions, from the Caribbean and further afield, complementing the investment being made by the GEF-Funded, CSIDS-SOILCARE Phase 1 Project at another location in the island. The GEF increment will overall enhance the resilience of the ecosystem to climate change and contribute to the long-term economic viability of the communities as a direct result of environmental enhancement. Opportunities for alternative livelihood options will be expanded, providing stimulus for attracting increased investments to the community.</p>

Baseline	Incremental Cost
<p>Under a business-as-usual scenario there will remain an absence of a focussed approach to addressing land degradation in a coordinated and integrated manner among stakeholders. There will continue to be limited capacities among farmers and target communities to acquire knowledge and apply tools and methodologies to reduce land degradation. Stakeholders will not have ready access to needed documented best practices and other references to guide them in implementing restoration measures. Without the GEF investment, the awareness on the challenges of land degradation will not be elevated to a high enough level of recognition of importance to elicit needed appropriate behavioural change. There will be continued dysfunction in how livestock management is carried out on the island without definition of protocols that are agreed to at the community level that can be effectively put into practice. Overall, without focussed attention on capacity building and awareness raising, investments on the ground will see limited opportunity for replication and scaling up to other environments, with limited opportunity to capture lessons learned.</p>	<p>The GEF investment will contribute to enhancement of the governance framework for SLM Carriacou. This framework will build on the institutional coordination via the PSC catalysed by this project, as the basis for a long-lasting SLM mechanism. It will also build on the work initiated under the Climate Smart Agriculture and Rural Enterprise Programme (SAEP) and the Climate-Resilient Agriculture for Integrated Landscape Management (CRA) project on climate smart agriculture and rangeland management. This will be supported by the delivery of assessment tools and field methods, and build local capacities among technical professionals, farmers, beneficiary and community stakeholders to employ landscape restoration tools and methodologies and maintain sustainability of these measures. The project will contribute to ongoing capacity building efforts for national stakeholders in Carriacou and Grenada through other relevant initiatives. The project will help strengthen the capabilities of local stakeholders as trainers to impart knowledge. The project will expand overall awareness, particularly in the context of the climate change stressors in terms of the inherent vulnerabilities of a small landscape environment as is the case for Carriacou. This awareness will contribute to expanding buy-in among targeted stakeholders and the wider community to accelerate efforts in mitigating land degradation and enhancing climate resilience. This will be important in coming to agreement with support of the project, in improving livestock management through new and/or improved protocols (under the wider SLM governance mechanism) that will reduce not only direct impacts in terms of land degradation from intensive grazing but also contribute to reduced conflict among community members.</p>

6. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The project will generate the following main benefits:

- ? 250 ha of landscapes restored, and another 635 hectares will be under improved SLM, incorporating climate-resilient agriculture and improved livestock husbandry that will contribute to Grenada's land degradation neutrality voluntary targets;
- ? -76,656 tonnes CO2eq greenhouse gas emissions mitigated (over 20 years) through incorporation of improved cropping and agroforestry systems and enhanced carbon sequestration into soils within productive landscapes
- ? socio-economic returns from improved land productivity.

Components	Global Environment Benefits
<b>Component 1: Community-Based Landscape Rehabilitation and Protection using EbA approaches</b>	
Output 1.1.1: One plant propagation facility for multiplication of planting material to support land restoration by farmers and community members	The landscape restorative measures proposed under the project are in line with the objectives of the UNCCD 2018-2030 Strategic Framework to enhance the implementation of the Convention, specifically <i>Strategic Objective 1</i> : To improve the condition of affected ecosystems, combat desertification/land degradation, promote sustainable land management and contribute to land degradation neutrality, <i>Strategic Objective 2</i> : To improve the living conditions of affected populations and <i>Strategic Objective 3</i> : To mitigate, adapt to, and manage the effects of drought in order to enhance resilience of vulnerable populations and ecosystems. The project will contribute to Grenada's realizing Sustainable Development Goal 15 to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
Output 1.1.2: At least 250 ha restored grasslands, agricultural lands at Bellevue South Dumfries through improved soil and land conservation measures implemented by farmers and community members	
Output 1.1.3: Five water conservation installations (mini-dams) to enhance moisture retention at sites restored by farmers and community members	
<b>Component 2: Strengthening landscape governance for application of SLM and EbA tools</b>	



<p>Output 2.1.1: Effective local coordination mechanism for SLM including co-management protocols for savannah grass lands for implementation by local government agencies, farmers, livestock owners and the local community</p>	<p>The improved governance framework for SLM implementation on Carriacou and the increased capacity of small farmers and local communities to adopt and implement SLM approaches and technologies will contribute to increasing ecosystem resilience to the global threat of climate change. The project will contribute to capability to evaluate land degradation and environmental status of productive agricultural landscapes, contributing to the basis for determining progress toward safeguarding and enhancing GEBs in line with the UNCCD 2018-2030 Strategic Framework. Knowledge management systems will be put in place to facilitate publication and dissemination of best practices and lessons to stakeholders from local to global levels, to encourage uptake and replication of the approaches applied in this project.</p>
<p>Output 2.1.2: Package of gender-sensitive SLM approaches /technologies and training events for uptake and application over 635 ha by farmers and community beneficiaries and made available through online knowledge platforms.</p>	
<p>Output 2.1.3: Public awareness and education plan implemented targeting farmers, school children and the community.</p>	
<p>Output 2.1.4: Gender Sensitive Monitoring and Evaluation Framework in Support of Project Implementation</p>	

7. Innovativeness, sustainability and potential for scaling up

***Innovation:*** The project intends to introduce innovation in best practices in landscape restoration approaches that have been developed and successfully applied not only in Carriacou and Grenada, but in other environmental conditions that are similar to those in Carriacou. The island is relatively arid, and it will be necessary to incorporate nature-based that are resilient in such conditions, considering climate change influences. The project will employ a combination climate-smart agricultural production practices and sustainable livestock husbandry that will help ameliorate soils, reduce degradation and pollution, enhance carbon sequestration and conserve biodiversity. The project will introduce innovative



approaches for water conservation necessary to support vegetative restoration, building on already well-established traditional methods in Carriacou for on-site water storage and distribution. Where appropriate, solar power systems will be installed to provide lift for water distribution established in the project. The project will deploy state-of-the-art tools and methods for assessment and monitoring of land degradation developed by Trends Earth.[29]<sup>28</sup>

***Sustainability:*** A key to ensuring sustainability of the project will be to secure buy-in from the targeted communities, with an underpinning of enhancing livelihood options. Emphasis will be placed on identification and implementation of restoration solutions that are cost-effective so as to increase opportunity for uptake and replication by beneficiaries over the longer term. The project will adopt ecosystem-based or nature-based solutions that will utilize locally available vegetation species in landscape restoration that are known to be resilient to arid moisture regimes and will incorporate good practices into agricultural systems that are developed in close consultation with farmers. This will be supported by enhancement of capacities of stakeholders that is that is assisted through partnerships between technical agencies, the farmer association and community groups. One specific output of the project that will be core to long-term sustainability, is the development of a governance and coordination mechanism for SLM that includes community-based co-management protocols to better address the challenges posed by unrestricted livestock grazing that is a key causal factor of land degradation on the island. Specifically, the Carriacou Land Management Committee will be established as a sub-committee of the National LDN Committee that will evolve into a post-project mechanism. The Government of Grenada through the Ministry of Agriculture and Lands, Fisheries & Cooperatives and the Ministry of Carriacou and Petit Martinique Affairs have committed to long-term support to the efforts that will be initiated under the project and will ensure that needed linkages are made to other relevant interventions to exchange knowledge and best practices. Core to this long-term support will be in the form of provision of recurrent budget inputs in maintenance of the investments and support continued capacity building as required. In meeting the challenges of the COVID-19 pandemic the Ministry of Agriculture and Lands, Fisheries & Cooperatives (through its Division of Agriculture) has offered support in placing more emphasis on backyard gardening as a means of food security in Carriacou with efforts to boost production at all government-operated farms on the island. A key element in sustainability is the Ministry's efforts at promoting and encouraging youth to get involved in the sector, through initiatives such as the 4H Programme. The foregoing will create conditions for long-term sustainability through demonstration of livelihood benefits for local communities that will feed the motivation for continued action after the project is completed.

***The scaling ? up potential:*** Solutions will be designed in the context of small island environments that are cost-effective and lend themselves to scaling up at a wider scale on Carriacou, Grenada and other Caribbean SIDS with similar issues. Key to scaling these solutions will be the documentation of demonstrated results and effectiveness. The innovation in tools and methods to enhance local technical capacity among farmers, the local community and among technical support staff in government and support organizations will be an essential aspect to successful scaling up and it is expected that persons trained will serve as resource persons to exchange experiences and knowledge within the country and in the wider Caribbean. Component 2 of the project is designed primarily to support the upscaling process, specifically enhancing the capacity for replication of solutions and innovation in application of

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ecosystems-based adaptation measures demonstrated under Component 1. This capacity will be enhanced at the local level in Carriacou among the direct beneficiaries and the technical support agencies, with lessons learned and experiences, feeding into wider knowledge and capacity building networks at the national, Caribbean regional and international levels, specifically targeting SIDS. A key element that will form the foundation of the scaling-up process, will be consolidation of knowledge (gained from Component 1) into a package of effective SLM and EbA approaches, technologies, training tools, best practice guidelines and awareness resources for use locally; a core of which is already available under the GEF CSIDS ? SOILCARE Phase 1 project (being executed by the PISLM in partnership with FAO), drawing on experiences from participant Caribbean countries. The project implementation process under Component 2 will validate the guidance methodologies, and test applicability across the rest of Carriacou within environments beyond the targeted restoration area. Therefore, while the project directly targets 750 farmers and community members engaged in farming and land resource use, it is anticipated that the overall populus of Carriacou will be wider beneficiaries as a result of knowledge scaling up thereby influencing behaviour change at the wider level.

The organizational mechanism to facilitate and assure upscaling will be rooted in the mandate and work of the Project Steering Committee in the initial stage. The PSC shall serve as a sounding-board and primary planning mechanism to ensure that innovation developed and demonstrated during this project is mainstreamed in land resource development and management processes influenced by the various stakeholders, including farmers, extension officers and the local community. As noted above, the project will transition the PSC over the course of implementation to the local Carriacou Land Management Committee (that will be established as a sub-committee of the National LDN Committee) that will continue as a post-project mechanism that will be integrated within the Ministry of Carriacou and Petit Martinique Affairs. In addition, the inclusion of non-governmental stakeholders on the PSC and within the governance mechanisms of the project components, will provide opportunity for widening the land stewardship ethic among these non-governmental and private sector interests.

In turn, the adoption and replication of sustainable land management innovations and practices by these stakeholders will be enhanced, increasing the likelihood of attaining the national LDN targets by 2030. To support internalizing and uptake of the project deliverables within local management capacity, the project will employ a train-the-trainer? approach to ensure that skills acquired by those initially targeted (extension officers and farmers) in the project training programme, are passed to others within an agreed period. The effectiveness of the capacity building resources will be assessed and adjusted as required toward continued long-term application. Demonstration of, and successful implementation of SLM practices and technologies across the degraded landscapes through active investment by landowners, farmers, including women and youth stakeholders, will be the basis for replication. The project will contribute to the transformational movement for greater adoption of such technologies at the local and national level and in the promotion and application of ?flagship? practices at the subregional and regional scales.

The Partnership for Sustainable Land Management (PISLM), through its regional mandate of supporting Caribbean countries in meeting their obligations under the UNCCD will play a key role in showcasing the lessons learned from the project through knowledge exchanges with partners in the region. The outputs of the GEF projects, *Sustainable Land Management in the Commonwealth of Dominica* and *Strengthening Resilience of Agricultural Lands and Forests in Dominica in the Aftermath of Hurricane Maria* for which the PISLM is Executing Agency, will be drawn on as relevant to this project, for scaling-up and knowledge transfer. Part of the scaling-up process will be inclusion of the tools, methodologies and resources developed under this project within the knowledge hub that is being developed under the GEF-SOILCARE project for which PISLM (in partnership with FAO) is executing. The knowledge hub will serve the wider Caribbean countries in exchange and transfer of knowledge, and afford access by stakeholders from this project to best practices and technologies from other projects from across the Caribbean. Important regionally-based partners in the upscaling efforts are the Inter-American Institute for Cooperation on Agriculture (IICA), Caribbean Agricultural Research and Development Institute (CARDI) and UWI. These agencies have a long history of cooperation in capacity building and knowledge dissemination in the Caribbean region and will integrate the learnings from the project within their networks in the Caribbean region. The project will contribute to scaling-up at the global level with

particular relevance to SIDS, where tools and methods available through knowledge hubs such as WOCAT and Trends Earth will be applied, and lessons learned are contributed to global efforts in assessing, monitoring and arresting land degradation.

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[2] <https://agris.fao.org/agris-search/search.do?recordID=TT9400004>

[3] <https://www.mdpi.com/2079-9276/8/4/174>

[4] Listed as Carriacou Ridge/Mt. Pelea WDPa ID: 555592989  
<https://www.protectedplanet.net/en/country/GRD>

[5] <https://sites.google.com/site/grenadagrenadagrenada/national-parks>

[6] <https://www.cbd.int/countries/profile/?country=gd>

[7] [https://en.wikipedia.org/wiki/Carriacou\\_and\\_Petite\\_Martinique#](https://en.wikipedia.org/wiki/Carriacou_and_Petite_Martinique#)

[8] <https://gov.gd/sites/default/files/docs/Documents/others/nsdp-2020-2035.pdf>

[9]  
[https://gov.gd/sites/maol/files/docs/Documents/Grenada%20National%20Land%20Policy%20\(Final\).pdf](https://gov.gd/sites/maol/files/docs/Documents/Grenada%20National%20Land%20Policy%20(Final).pdf)

[10]  
[https://gov.gd/sites/maol/files/docs/Documents/COUNTRIES\\_GRENADA\\_National\\_Agriculture\\_Plan\\_Final\\_Aug25\\_2015\\_Final\\_Edit\\_\(002\).pdf](https://gov.gd/sites/maol/files/docs/Documents/COUNTRIES_GRENADA_National_Agriculture_Plan_Final_Aug25_2015_Final_Edit_(002).pdf)

[11] <https://gov.gd/sites/mocr/files/docs/Documents/Grenada%20Forest%20Policy.pdf>

[12] <https://climatefinance.gov.gd/embedded-pdf/grenadas-gender-equality-policy-action-plan/>

[13] [https://knowledge.unccd.int/sites/default/files/ldn\\_targets/grenada-ldn-country-report.pdf](https://knowledge.unccd.int/sites/default/files/ldn_targets/grenada-ldn-country-report.pdf)

[14] <https://www.mdpi.com/2079-9276/8/4/174/htm>

[15] Grenada - Land Degradation Neutrality National Report  
[https://knowledge.unccd.int/sites/default/files/ldn\\_targets/grenada-ldn-country-report.pdf](https://knowledge.unccd.int/sites/default/files/ldn_targets/grenada-ldn-country-report.pdf)

[16] <https://www.slideshare.net/FAOoftheUN/priorities-and-needs-for-sustainable-soil-management-in-grenada-grenada>

[17]  
[https://unfccc.int/sites/default/files/resource/Grenada%20Second%20National%20Communication\\_Final%20%281%29%20%281%29.pdf](https://unfccc.int/sites/default/files/resource/Grenada%20Second%20National%20Communication_Final%20%281%29%20%281%29.pdf)

[18] [https://www.unccd.int/sites/default/files/naps/2021-03/Grenada%20Aligned%20National%20Action%20Programme\\_withcommsplan.pdf](https://www.unccd.int/sites/default/files/naps/2021-03/Grenada%20Aligned%20National%20Action%20Programme_withcommsplan.pdf)

[19] <https://www.nowgrenada.com/2020/09/agricultural-division-in-carriacou-boasts-increased-crop-production/>

[20] <https://saep.gov.gd/>

[21] <https://www.adaptation-undp.org/projects/bf-grenada#:~:text=The%20overall%20aim%20of%20the,analyzing%20and%20implementing%20adaptation%20strategies.>

[22] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which **Aichi Target(s)** the project will directly contribute to achieving.

[23] That includes farmers and other related interests.

[24] That is greenhouse, shade house, etc.

[25] The 'shenda grass' typically is found in association with mangrove ecosystems. It was very drought resistant species, and lasted throughout the dry season (D. Baker, personal communication, October 27, 2022).

[26] [https://knowledge.unccd.int/sites/default/files/ldn\\_targets/grenada-ldn-country-report.pdf](https://knowledge.unccd.int/sites/default/files/ldn_targets/grenada-ldn-country-report.pdf)

[27]

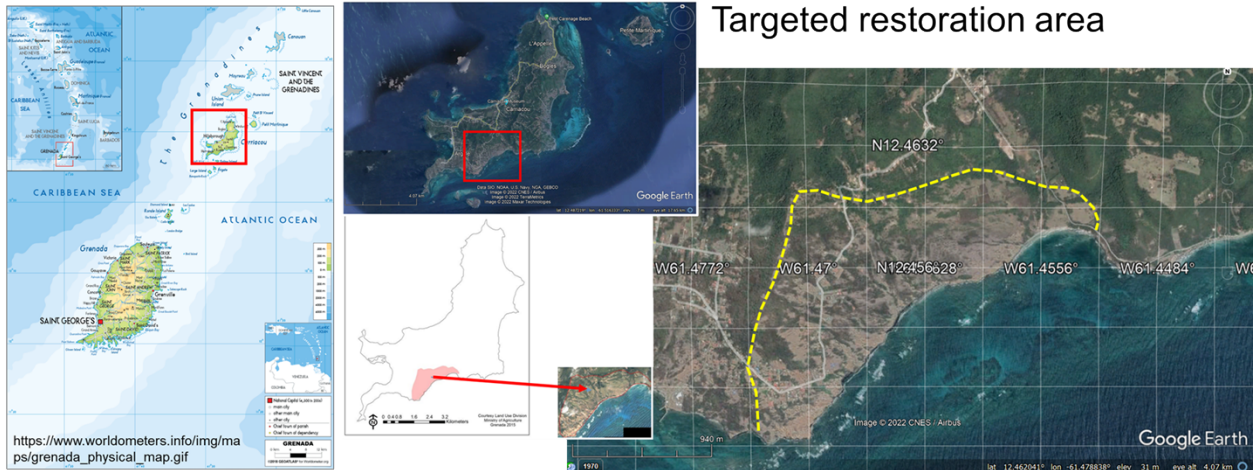
[https://gov.gd/sites/moal/files/docs/Documents/Grenada%20National%20Land%20Policy%20\(Final\).pdf](https://gov.gd/sites/moal/files/docs/Documents/Grenada%20National%20Land%20Policy%20(Final).pdf)

[28] Land governance is 'the process by which decisions are made regarding the access to and use of land, the manner in which those decisions are implemented and the way conflicting interests in land are reconciled' (UNCCD/Science Policy Interface, 2019, p. 2).

[29] <https://trends.earth/docs/en/index.html>

## **1b. Project Map and Coordinates**

**Please provide geo-referenced information and map where the project interventions will take place.**



Refer to Annex E for more details.

**1c. Child Project?**

If this is a child project under a program, describe how the components contribute to the overall program impact.

**2. Stakeholders**

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

See Annex P.

The main stakeholders include Government agencies, non-Governmental organizations and the private sector. All stakeholders were involved in the project design and will be involved in project implementation with the IICA, CARDI, UWI, and PISLM all have major roles to play in implementing some key project activities.

A number of participatory activities were undertaken during the PPG phase of the collection of baseline data that was critical to the design of the project: A Stakeholder inception meeting was convened at the beginning of the PPG phase to inform them on the commencement of project development, to introduce

them to the consulting team contracted to develop the proposal and to obtain reassurance of their continued commitment as well to share any new information they might have felt inclined to do, given their continued interest in the project.

Throughout the preparation of the project proposal, stakeholders were consulted, both in groups and individually, by the consulting team, as they sought to gather the information that would further identify challenges that would hinder the realisation of intended results. More significantly, their engagement was to seek the input of these various stakeholders in identifying project priorities, particularly as it related to areas where they have a direct interest as a potential beneficiary or where they have agreed, to partner with PMU in the implementation of the project.

Consultations with stakeholders at various levels during the PIF development and PPG phases considered their needs and priorities (Annex T summarizes the key consultation events). The budgetary allocations and capacity building components of the project reflect those considerations. Provisions are made to address certain capacity limitations particularly among government agencies both during and post-project. The project will support key stakeholders with the necessary training, equipment and technical support that will not only assist them to meet project objectives but to increase their institutional capacities to effectively deliver on their respective overall mandates.

During project implementation, stakeholder participation will include their provision of in-kind co-financing, participation in capacity enhancement workshops and technical training sessions, involvement in project oversight through participation on the PSC, as data providers, technical expertise, and knowledge management through the institutionalization of project results and lessons learned to allow for up-scaling, replication, and sustainability.

The inclusion and engagement of Civil Society Organizations (CSOs) and the public in the implementation of the project will ensure their direct participation in the governance and decision-making aspects of the project. In all instances, the standards and guidelines of the GEF Policy on Environmental and Social Safeguards shall apply, especially as it relates to ensuring appropriate stakeholder participation.

Refer to [Annex P](#) for the detailed Stakeholder Engagement Plan.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated,

and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

**Table 2.** Project Stakeholders and their Roles in Project Implementation

Stakeholder	Summary of Mandate	Roles in Project Implementation
<p>Ministry of Agriculture and Lands, Fisheries &amp; Cooperatives</p>	<p>Driving the process of transforming the economic well-being and quality of life of the nation in accordance with targeted goals and objectives. Specifically, responsible for agriculture, food production, agricultural marketing, horticulture, food quality control, plant protection, veterinary services, public lands</p>	<p>Maintain liaison among the various stakeholders in the project area in development of the project and facilitating buy-in. Provide guidance on policy and regulatory elements related to enhancing project sustainability, cross-sectoral integration, and organisational/stakeholder coordination for SLM. Provide project oversight as member and Chair of the PSC.</p>
<p>Ministry of Carriacou and Petit Martinique Affairs</p>	<p>Enhancing and improving the way of life and well-being of the people of Carriacou and Petite-Martinique.</p>	<p>Maintain community group and farmer engagement and provide technical and policy guidance during implementation of project activities. Provide project oversight as member of the PSC.</p>
<p>Ministry of Climate Resilience, The Environment and Renewable Energy</p>	<p>Enhancing Grenada's ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate.</p>	<p>Provide consultative inputs in project implementation related to forest and environmental management policy, climate resilience strategy integration.</p>
<p>Ministry of Health &amp; Social Security</p>	<p>The Ministry of Health is the sole public institution responsible for the provision of health services in Grenada, Carriacou and Petit Martinique. It is accountable for Policy Formulation, Planning, Implementation, Monitoring and Evaluation of its services provided to the Grenadian citizens.</p>	<p>Provide consultative inputs project implementation related to upholding environmental and public health safeguards through direct bilateral engagement and in group planning discussions.</p>
<p>Gender and Family Affairs Division</p>	<p>The Division of Gender and Family Affairs is the National Women's/Gender Equality Machinery.</p>	<p>The primary technical resource agency for this project in providing guidance on ensuring that gender-based benefits are accrued to beneficiaries. Technical support to tracking gender-based benefits and metrics in the project.</p>



Stakeholder	Summary of Mandate	Roles in Project Implementation
Grenada National Organization of Women (GNOW)	Champion the cause of women to ensure there is gender equality and fairness in all sectors of life.	Will provide consultative inputs in project implementation on ensuring that gender considerations are adequately incorporated through direct bilateral engagement and in group planning discussions. Provide project oversight as member of the PSC
Partnership Initiative on Sustainable Land Management (PISLM)	The Partnership Initiative for Sustainable Land Management (PISLM) for Caribbean SIDS, is the inter-governmental convening mechanism for advancing sustainable land management within the implementation framework of the United Nations Convention to Combat Desertification (UNCCD) for the Caribbean SIDS established by the Forum of Ministers of Environment for Latin America and the Caribbean (Decision 4 of 2003).	PISLM will be the Executing Agency for the project implementation phase (in close collaboration with the Ministry of Agriculture and Lands, Fisheries & Cooperatives and Ministry of Environment of the Government of Grenada). PISLM will establish a Project Office in Carriacou, Grenada. PISLM is executing two active GEF-UNEP land degradation projects in Dominica and is the executing agency for the CSIDS SOILCARE Project Phase 1 and will lever this experience and networking to this project.
The PISLM Task Force	The main function of the PISLM Task Force is to provide operational policy guidance to the PISLM taking into consideration the policy directives which are provided by the various Ministerial and Inter-government Bodies.	Monitor the application of the resources of the recurrent and capital budgets of the PISLM in order to ensure that such resources are being employed in accordance with this Agreement and the Work Programme of the PISLM approved by the Task Force
<b>Key private sector:</b> Carriacou Farmers Association	Campion the rights and interests of its members by enhancing farmers' knowledge and skills, to increase livestock and crop yields, and overall improvement in members livelihood	Will provide consultative inputs in project implementation and assist in the mobilization and participation of its members in workshops, meetings, relevant project activities and encouraging other farmers in Carriacou to adopt the best practices of the project. Provide project oversight as member of the PSC.



Stakeholder	Summary of Mandate	Roles in Project Implementation
<p><b>Key private sector:</b>  <b>Food distribution/retail:</b> Marketing and National Importing Board (Carriacou), Alexis Food Stores, Matheson Supermarket, Kims Plaza Supermarket  <b>Restaurants:</b> Laurena Jerk Centre, Bogles Roundhouse  <b>Yachting:</b> Tyrell Bay Marina, Carriacou Marine Limited  <b>Hotels:</b> Mermaid Hotel, Hotel Laurena, Carriacou Grand View Hotel  <b>Tours/excursions:</b> Carriacou Tours, Kido Foundation</p>	<p>The ?Marketing Organization? was established ?for the development of agriculture generally and in particular, for providing an outlet to farmers for vegetables and fresh fruits in order to encourage the production of local food crops.</p>	<p>Will provide consultative inputs in project design in context of interest in locally grown food supply augmentation stimulated by the project to meet demands for local population and visitors, and potential opportunities in nature-based tourism associated with areas to be restored. This will be through direct bilateral engagement and in broad group planning discussions. Will collaborate with project in providing green waste from the hospitality and retail sector for composting to assist the nursery operations.</p>
<p>Inter-American Institute for Cooperation on Agriculture (IICA)</p>	<p>IICA supports member countries to improve the productivity and competitiveness of their agricultural sectors, including improving agriculture?s capacity to mitigate and adapt to climate change.</p>	<p>Will provide technical inputs in project implementation related to capacity building for farmers and agricultural extension staff on the use of soil conservation and farming techniques.</p>
<p>Caribbean Agricultural Research and Development Institute (CARDI)</p>	<p>An Institution of the Caribbean Community charged with the responsibility of providing for the research and development needs of the agriculture of the region as identified in national plans and policies, as well as providing an appropriate research and development service to the agricultural sector of member countries.</p>	<p>Will provide technical inputs in project implementation related to capacity building for farmers and agricultural extension staff on the use of soil conservation and farming techniques</p>
<p>University of the West Indies (UWI)</p>	<p>The UWI St. Augustine offers the best experts from across the globe as a leader in research across eight faculties. Our experts and researchers are the first ?port-of-call? for solving the problems facing the Caribbean region.</p>	<p>Will provide technical inputs in project implementation related to capacity building for farmers and agricultural extension staff on the use of soil conservation and farming techniques. Provide project oversight as member of the PSC.</p>

Stakeholder	Summary of Mandate	Roles in Project Implementation
United Nations Development Programme (UNDP)	UNDP's work focuses on helping to eradicate poverty, reduce inequalities and exclusion, and build resilience so countries can sustain progress. As the UN's development agency, UNDP plays a critical role in helping countries achieve the Sustainable Development Goals.	Will provide policy and technical guidance to ensure synergies occurs between this project and relevant initiatives being implemented by UNDP.

Select what role civil society will play in the project:

**Consulted only;**

**Member of Advisory Body; Contractor;**

**Co-financier; Yes**

**Member of project steering committee or equivalent decision-making body; Yes**

**Executor or co-executor;**

**Other (Please explain)**

### 3. Gender Equality and Women's Empowerment

**Provide the gender analysis or equivalent socio-economic assesment.**

See Annex Q

Grenada is committed to protecting and maintaining the rights of all its citizens as enshrined and expounded in the constitution, which entitles women, men, boys, and girls to equal rights to exist in freedom, dignity, peace and non-discrimination. Since the Government of Grenada adopted its National Gender Equality Policy and Action Plan (GEPAP)[30] in 2014, many achievements regarding gender equity and equality have been reached and Grenada continues to make strides towards the social and economic achievement of women and indeed towards full gender equity and equality. The GEPAP will be used as the framework for mainstreaming gender into all areas of the project, as gender and social issues are important drivers and incentives for achieving global environmental benefits and therefore are a critical element for the success of the project. The GEPAP will be used as the framework for mainstreaming gender into all areas of this project with the intent of promoting gender equality in the sector and its importance in facilitating agricultural diversification, food security, economic growth, poverty reduction, and sustainable development in the context of Carriacou. The key actions identified in the GEPAP will be in alignment with the areas that will be addressed under this project (see Annex Q)

that includes building awareness to break perceptions that relegates agriculture to marginal groups, widening engagement and empowerment of male and female farmers in the agricultural sector, promoting gender equity in leadership and decision making among others.

The project will play an important role in the empowerment of women in Carriacou in enhancing the skills and knowledge levels of women in implementing sustainable agriculture, which is important as women play a major role in agricultural production and associated activities within the project area and on Carriacou in general. Gender related aspects of the project will be addressed through close collaboration with the Grenada National Organization of Women (GNOW) who will work with communities and organizations to ensure gender equity in participation of women in project activities, to ensure socioeconomic benefits. All training and demonstration events will attempt to ensure that gender equity will be facilitated/fostered. The project is designed in a manner which places emphasis on the promotion of gender equality and women empowerment. Hence gender issues will be mainstreamed in all of the project activities. In addition, all the data collected by this project will be disaggregated by sex. This will provide for a more reliable gender related information on this project.

As such, this project will actively seek to recruit at least 50% of women as project staff and technical consultants, and to include women from relevant ministries and agencies (e.g. Agricultural Extension Services) in project activities on capacity building. All knowledge management activities will be gender mainstreamed, including the integration of gender dimensions into publications, for instance, presenting sex-disaggregated data, using gender sensitive language in publications and photos that show both women and men and avoid presenting stereotypes. Finally, the project will ensure that women, men, youth and indigenous peoples have access to and benefit from the knowledge created by the project. These measures are included in the project to facilitate gender sensitivity and equality and are outlined the Gender Strategy and Action Plan in [Annex Q](#). Further an expert with gender experience will be part of the core team and ensure that gender considerations be integrated. Representatives of the Division of Gender Relations and the Grenada National Organization of Women will serve on the PSC. [Refer to the Baseline Report, Annex U2 for additional information.](#)

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[30] <https://climatefinance.gov.gd/embedded-pdf/grenadas-gender-equality-policy-action-plan/>

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?**

Yes

**Closing gender gaps in access to and control over natural resources; Yes**

**Improving women's participation and decision making Yes**

**Generating socio-economic benefits or services or women Yes**

**Does the project's results framework or logical framework include gender-sensitive indicators?**

Yes

#### 4. Private sector engagement

##### Elaborate on the private sector's engagement in the project, if any.

The project will actively engage private sector interests in Carriacou during implementation. The private sector in Carriacou, apart from farmers and agri-entrepreneurs, is relatively small and is dominated by the hospitality (hotel, yachting, water taxi), retail and services sectors. A 2012 Government of Grenada/UNDESA study[31] noted that there are potential opportunities for integration of agriculture and ecotourism sectors to enhance sustainable resource use on the island where it has been further proposed that a fraction of tourism related profits can be used to finance environmental protection and conservation. In Carriacou private sector in the retail, hospitality and yachting sectors will have interest in local food supply and provisioning services. Key enterprises include the Marketing and National Importing Board (Carriacou), Alexis Food Stores, Matheson Supermarket and Kim's Plaza Supermarket in local food retail and distribution; Laurena Jerk Centre, Bogles Roundhouse within the restaurant sector; Mermaid Hotel, Hotel Laurena and Carriacou Grand View Hotel representing the hospitality sector, and Tyrell Bay Marina and Carriacou Marine Limited representing the yachting sector. Companies and community-based organizations that offer excursions on the island include Carriacou Tours and the Kido Foundation, which are of interest in the context of offering nature-based experiences that could potentially be integrated with the land restoration and conservation work that is anticipated under the project.

As such, the project will facilitate the collaboration between the Carriacou Farmers Association (CFA), a private not-for-profit entity, and the Ministry of Carriacou and Petit Martinique Affairs on the co-management of the propagation facility that will be construction by this project. Also, the project will provide the framework for collaboration between the Ministry of Carriacou and Petit Martinique Affairs, the Grenada Tourism Board and local NGOs to utilize the restored lands in Belle Vue South as an eco-tourism site.

Further, through a collaborative approach, green waste from various eateries, e.g. Laurena Jerk House, Hotels, e.g. Mermaid Hotel and schools will be collected for composting to provide organic matter for rooting medium for the operations of the propagation facility that will be installed under this project. Table 3 lists the specific contributions and modes of engagement among the private sector entities in Carriacou in the project.

Table 3. Private sector engagement in the project (refer to expanded table in Annex P)

Private sector stakeholder group	Name	Contribution to project
Farmers	? Carriacou Farmers Association	? Guidance on project services; best method for learning  ? Supply of green waste for compost ? nursery production  ? Advocacy and community outreach

Private sector stakeholder group	Name	Contribution to project
Food distribution/retail	? Marketing and National Importing Board (Carriacou) ? Alexis Food Stores ? Matheson Supermarket ? Kims Plaza Supermarket	? Supply of green waste for compost ? Sponsorships / incentivization to community members, schools ? Advocacy and community outreach
Restaurants	? Laurena Jerk Centre ? Bogles Roundhouse	? Supply of green waste for compost ? nursery production ? Sponsorships / incentivization to community members, schools
Yachting	? Tyrell Bay Marina ? Carriacou Marine Limited	? Supply of green waste for compost ? nursery production ? Sponsorships / incentivization to community members, schools
Hotels	? Mermaid Hotel ? Hotel Laurena ? Carriacou Grand View Hotel	? Supply of green waste for compost ? nursery production ? Sponsorships / incentivization to community members, schools
Tours/excursions	? Carriacou Tours, ? Kido Foundation	? Sponsorships / incentivization to community members, schools ? Advocacy on recreational values of enhanced ecosystem services (eco-tourism) from restoration

[31]

<https://sustainabledevelopment.un.org/content/documents/523421Final%20Pub%20Road%20Map%20Carriacou%20&%20Petite%20Martinique%20Grenada%20%20June2012.pdf>

## 5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Table 3. Assessment of Risks Associated with the Project and Proposed Mitigation Measures

Risk	Risk level	Mitigation Measures
<p>Grenada's significant vulnerability to natural disasters, which are likely to be exacerbated by climate change, poses a risk to achievement of the project outcomes. Major weather events, including hurricanes, have significantly harmed the population's well-being, the country's economic and fiscal stability, and ecosystem functioning and services (e.g. water quality and quantity; flood prevention; soil services; agricultural production; etc.), and future climate change related events could impact project efforts to foster more sustainable agricultural production and landscape restoration.</p>	<p>Medium</p>	<p>A major focus of the proposed project is to mitigate the risks posed by climate change related natural disasters, especially those arising from meteorological events. The project will strengthen the resilience of ecosystems by demonstrating and enhancing uptake of environmentally sound management practices. Training of farmers and local communities in sustainable agricultural practices, SLM and rehabilitation of degraded lands will enhance ecosystem resilience to withstand shocks associated with climate change-induced meteorological events. The project will prioritize SLM approaches that account for potential climate change impacts (resilient tree species selection, use of drought tolerant crops, adoption of soil conservation practices, minimal tilling, windbreaks, vegetative barriers) to limit soil erosion and land slippage in the event of heavy rainfalls.</p>
<p>The limited capacity of institutions, to provide effective delivery of services and to oversee backstopping support for the implementation of project activities.</p>	<p>Low</p>	<p>In general, the Government entities that will be responsible for implementation of various project activities tend to be under-resourced. To address this, the capacity building aspects will be designed to facilitate ease of replication not only by the government agencies but by stakeholders who will be trained as trainers. In development of the project under the PPG phase, commitment has been assured by both the Ministry of Agriculture and Lands, Fisheries &amp; Cooperatives and the Ministry of Carriacou and Petit Martinique Affairs in continued support in provision of financial resources via recurrent operational budgets for maintenance of the investments. The Executing Agency will establish project management presence in Grenada to ensure effective project implementation. The project will be adaptively managed as needed through flexibility measures such as reprogramming of activities if and as appropriate within the project results framework and implementation schedule and timely addressing of delays.</p>
<p>Co-financing from different partners may flow slowly due to different institutional cultures</p>	<p>Low</p>	<p>The project has secured commitments from core partner institutions. All of the identified co-financing is related to programs and projects that are already ongoing, and therefore the provision of co-financing is considered secure and can be expected to be contributed in line with project implementation.</p>

Risk	Risk level	Mitigation Measures
Willingness of small farmers and local communities to adopt new land management tools and methodologies and to change agricultural and farming practices that contribute to land degradation and biodiversity loss.	Low	The application of location-specific, effective SLM technologies that produce both environmental and economic benefits (in terms of production increases and/or cost reductions) via consultations with farmers and stakeholders, will provide positive incentives for adoption. To support the effort, the project will carry out targeted awareness raising to increase stakeholder and public understanding and awareness on the threat of land degradation and the importance of implementation of SLM options.
The Implications of COVID-19	Medium to High	Given the uncertainty associated with the re-occurrence of COVID-19 in the region over the forecasted duration of the project, this remains a risk factor. To mitigate the risk, Grenada has health management protocols which would be reactivated if necessary during execution of the project.

## 6. Institutional Arrangement and Coordination

**Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

### *Institutional project structure, monitoring, evaluation and coordination:*

**Project Implementing Agency:** The United Nations Environment Program (UNEP) is the GEF's Implementing Agency for this project. UNEP is tasked with the overall responsibility of ensuring that GEF policies and criteria are adhered to and that the project meets its objectives and deliver on expected outcomes. Other specific Implementing Agency responsibilities include ensuring compliance with GEF policies and standards for results-based M&E, fiduciary oversight, safeguards compliance, project budget approvals, technical guidance and oversight of project outputs, approval of Project Implementation Reports (PIRs), and participation in the project's superior governance structure.

**Project Executing Agency:** The Partnership Initiative for Sustainable Land Management (PISLM) will function as the project Executing Agency (EA) on behalf of the Ministry of Agriculture and Lands, Fisheries & Cooperatives and will have responsibility for the overall day to day management for project implementation through a Project Management Unit. The Ministry will provide the political and institutional supervision for the overall project activities as implementing partners. A Project Cooperation Agreement (PCA) will be issued by UNEP to PISLM to establish this executing function, with provision of financial resources. The PISLM in performing its functions as the Executing Agency will have its work overseen by different entities at different levels within the remit of the PSC but also at the regional Caribbean Community (CARICOM) level. At the CARICOM level, the PISLM is mandated to report to the Council on Trade and Economic Development (COTED) of the Caribbean Community on its stewardship including, *inter alia*, sustainable land management projects and initiatives being implemented by the PISLM on the behalf of Caribbean SIDS Member States. Feedback from execution of the project will be provided through regular updates to the COTED. The PISLM Task Force will facilitate the mainstreaming of best practices from other PISLM projects into this project.

**Project Management:** The PISLM will establish Project Management Unit (PMU) that will be led by a Project Coordinator and supported by an Administrative Officer. The PMU will carry out the day-to-day management of the project, ensure successful realization of project outputs, deliver all technical and financial reporting, liaise with project partners and act as the Secretariat to the Project Steering Committee (PSC). The PMU will ensure annual financial audits of expenditure conducted and contribute to the conduct of a mid-term review and terminal evaluation, with engagement of the PMU and beneficiary

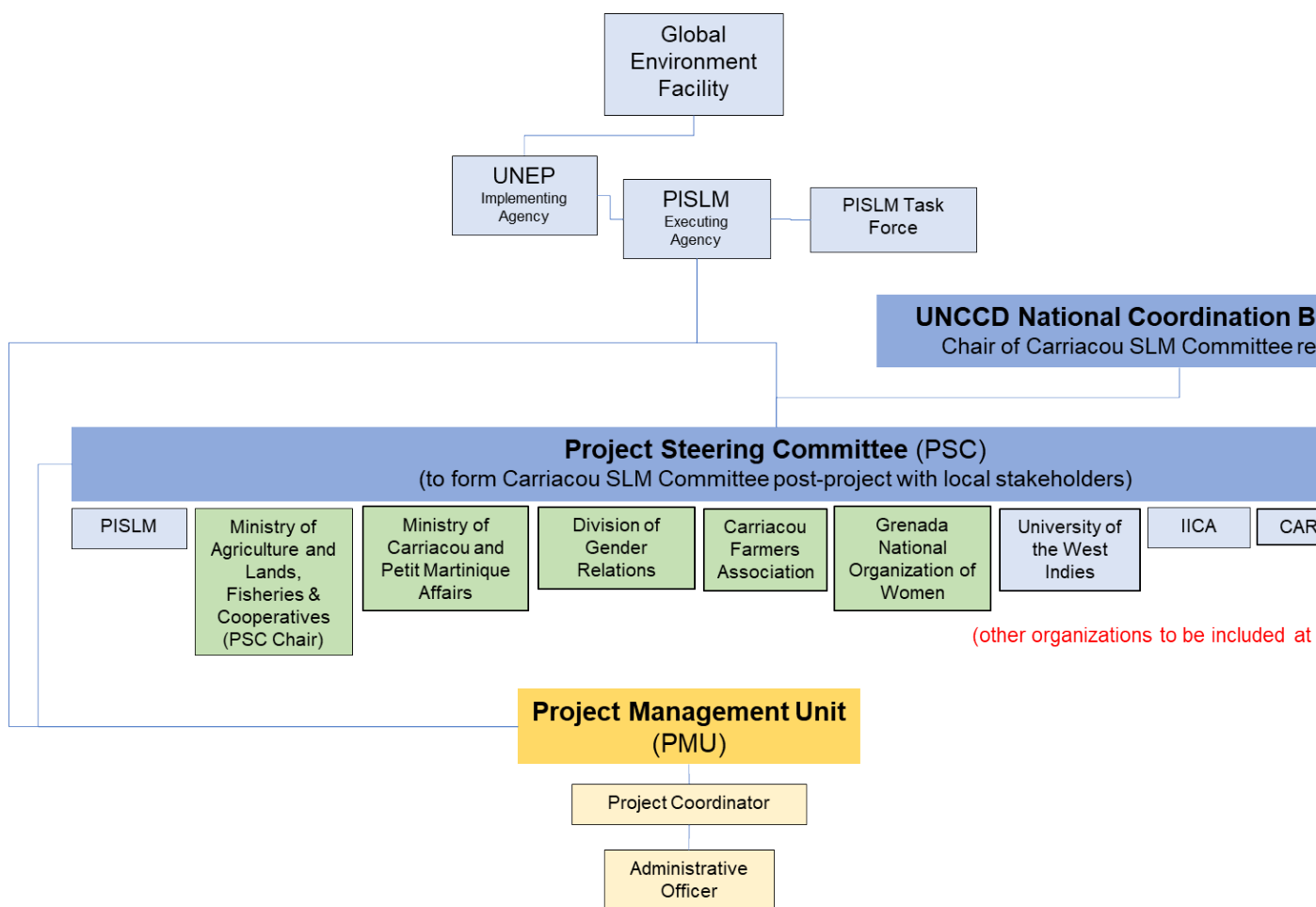
stakeholders. The PMU for this project will be based in Carriacou and will function in liaison with PISLM's country office in St. Georges, Grenada.

**Project Steering Committee (PSC)** will be established to provide technical oversight to project implementation and will be nested within the framework of the UNCCD National Coordination Body (NCB) that will facilitate mainstreamed representation from Carriacou, to national-level strategic planning and implementation of the National Action Plan. The PSC will provide oversight and guidance to the project and will be chaired by the Ministry of Agriculture and Lands, Fisheries & Cooperatives. The PSC will comprise of organizational representation at senior levels of the various national implementing agencies (and local-level in Carriacou), partner organizations (including CSOs and CBOs), specifically from the Ministry of Agriculture and Lands, Fisheries & Cooperatives, the Ministry of Carriacou and Petit Martinique Affairs, the Division of Gender Affairs, the Carriacou Farmers Association, the Grenada National Organization of Women, as well as key scientific and technical partners, the University of the West Indies, CARDI, and IICA. The UWI, CARDI, and IICA will play important roles in transfer of best practice to local practitioners (Carriacou and Grenada) and scaling up of application of knowledge acquired from the project implementation to academic and communities of practice at the regional level. The IA will be Ex-officio of the PSC, whereas the PISLM will serve as the Secretary to the PSC. UNEP in its capacity as Implementing Agency will have a seat on the PSC and be recipient of substantive technical reports (half-year, and annual Project Implementation Review reports) and quarterly financial reports. The project will aim to have gender parity in representation on the PSC. The composition, responsibilities and rules of operation of the PSC will be further considered and detailed at the commencement of project implementation. The project will facilitate the means to retain a post-project governance/coordination mechanism for SLM on Carriacou (proposed Carriacou Land Management Committee) based on the working modalities of the PSC.

The Government of Grenada will be the de facto owner of this project. Country ownership will be assured through the chairmanship of the Project Steering Committee by the Government of Grenada through the Ministry of Agriculture and Lands, Fisheries & Cooperatives, with close guidance by the Ministry of Carriacou and Petit Martinique Affairs to ensure representation of local community interests. Buy-in will be augmented by representation of the Carriacou Farmers Association on the PSC. Country ownership by national agencies will be further incentivized through provision of training and receipt of appropriate tools to carry out their mandates.

The project management structure is illustrated in Figure 3.





**Figure 3.** Project management arrangements.

*Coordination with other relevant GEF-financed projects and other initiatives:* A number of on-going initiatives in Grenada have interlinked objectives with the proposed project and will contribute to strengthening the data and knowledge available for Grenada in relation to specific environmental issues and, the proposed project intervention will draw on lessons learnt from these GEF projects including:

**(1) *Caribbean Small Island Developing States (SIDS) Multicountry Soil Management Initiative for Integrated Landscape Restoration and Sustainable Food Systems: Phase 1 (CSIDS-SOILCARE Phase 1).*** CSIDS-SOILCARE Phase 1, in addition to contributing to the achievement of SDG 15.3, and more specifically to Land Degradation Neutrality (LDN), addresses the drivers of land degradation and barriers to SLM in the Caribbean, including, *inter alia*, overexploitation of forest resources and expansion of agriculture in accessible areas, improper use of fertilizers and other agro-chemicals and inadequate soil and water management at a scale for sustaining soil functions and related ecosystem services, unsustainable forestry and agricultural systems, including logging, cropping and livestock management practices. Opportunities for cross-collaboration will include capacity building and enhancing knowledge management and replication.

**(2) *Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (GEF-IWEco Project).*** This five-year multi-focal area regional project has four components that are relevant to the design of this project; (1) Development and Implementation of Integrated Targeted Innovative, climate-

change resilient approaches in sustainable land management (SLM), integrated water resources management (IWRM) and maintenance of ecosystem services; (2) Strengthening of the SLM, IWRM and ecosystems Monitoring, and Indicators framework; (3) Strengthening of the Policy, legislative and institutional reforms and capacity building for SLM, IWRM and ecosystem services management taking into consideration climate change resilience building and (4) Enhancing knowledge exchange, best practices, replication and stakeholder involvement. The lessons learned from Component 1 in other Caribbean SIDS will be highly instructive in uptake and replication for this project in Carriacou.

**(3) *Climate-Resilient Agriculture for Integrated Landscape Management*** (UNDP-supported) incorporates sustainable land management (SLM) and biodiversity conservation into production landscapes, as a solution to biodiversity loss and land degradation in the country. It also incorporated into SLM climate smart agriculture (CSA) practices that can contribute to ensuring the long-term sustainability of agricultural production at the community and producer levels.

### **7. Consistency with National Priorities**

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

Grenada has articulated its commitment to sustainable land management in various government documents related to the UNCCD. These include UNCCD national reports, the National Action Program (NAP), and the Land Degradation Neutrality (LDN) Targets, which were established as a guide to the country's implementation program under the convention. The proposed project will draw on these plans with the view of implementing relevant aspects and supporting the country's efforts to meet its commitments under international conventions relevant to sustainable land management. Specifically, under the LDN-TSP the country has identified the rehabilitation of 383 ha of degraded land at Bellevue South in Carriacou by 2030. An area of 238 ha has been targeted for rehabilitation under this project. Grenada has recently approved its National Land Policy (NLP) and is currently pursuing a legislative process that integrates the sustainable land management components of the NLP into a *Draft Land Management and Natural Resources Bill*.

The country's *Second National Communication (SNC) of the Government of Grenada to the UNFCC (2017)*<sup>[32]</sup> details projected climate change and biophysical impacts, and outlines mainstreaming climate change adaptation activities into national development planning in the context of enhancing institutional frameworks, building coastal resilience, improving water resource management, and building the resilience of communities. Regarding the agriculture sector, climate change is forecasted to progressively undermine food supply and economic growth with negative consequences for the poor and other vulnerable groups in Grenada. Key recommendations to increase the resilience of the agriculture sub-sector against the impacts of climate change include reduction of land degradation due to inefficient agricultural practices, such as the land clearing on steep slopes, overgrazing (especially in Carriacou and Petite Martinique), poor soil and water conservation practices (including little use of organic matter) and avoidance of farming too close to riverbanks to avoid flooding of croplands. This also includes greater adoption and use of Climate Smart Agriculture (CSA) practices such as contour ploughing and planting, intercropping, rationalization of agrochemicals and investment in crop insurance schemes. In addition, Grenada's *Intended Nationally Determined Contribution (2016)*<sup>[33]</sup>, followed by the second *Nationally Determined Contribution (2020)*<sup>[34]</sup> commits to an economy-wide target to reduce emissions by 40% (below 2010 levels) by 2030, which covers the energy, forestry, waste and industrial processes and product use (IPPU) sectors. Related to

land management and emissions, emphasis will be placed on achieving reduction in forest fires that contribute to atmospheric carbon emission. The national land policy is cited in the NDC as providing guidance on addressing land use change in the future with the rehabilitation and protection of degraded landscapes. Improved water resource management through the capture, storage, distribution and conservation enhances the adaptive capacity of individuals and communities to climate change.

*The National Sustainable Development Plan (NSDP) (2020-2035)*<sup>[35]</sup> cites deforestation and indiscriminate clearing of lands, especially privately-owned, that are resulting in soil erosion and destroying natural habitats, causing loss of species with negative impacts on biodiversity. The NSDP notes that patterns of land use are changing, posing serious challenges for natural resources protection and conservation, such as mangrove wetlands and the ecological system overall. Under Outcome 4 of the NSDP that seeks 'Broad-based, Inclusive, and Sustainable Economic Growth and Transformation', climate-smart agriculture is cited as a key strategy to adapt to climate change along with modernization of irrigation systems and practices, increasing organic production to reduce the reliance on chemicals and pesticides, and strengthening hazard mitigation for the sector. This approach for the agriculture sector is echoed under Outcome 7; 'Climate Resilience and Hazard Risk Reduction' in terms of recommended national strategic actions.

Under the *Convention on Biological Diversity (CBD)*, the Government of Grenada, along with Parties to the Convention at the 15<sup>th</sup> Conference of Parties to the UN Convention on Biological Diversity, adopted *Kunming-Montreal Global Biodiversity Framework* (GBF) in December 2022. The GBF includes four goals and 23 targets for achievement by 2030. Among these are several targets that are directly relevant to this project;

Target 2. Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity; Target 8. Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity; Target 10. Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches contributing to the resilience and long-term efficiency and productivity of these production systems and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services. Target 22. Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders. Target 23. Ensure gender equality in the implementation of the framework through a gender-responsive approach where all women and girls have equal opportunity and

*capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.* [36]

*COVID-19 Recovery:* In 2020 the Government of Grenada rolled out the *COVID-19 National Food Security Mitigation and Response Plan*[37] to address the social and economic fallout particularly in the agriculture sector, associated with the pandemic. In this regard the project in Carriacou will directly complement the efforts under the Plan that seeks to enhance both crop and livestock productivity, where SLM considerations will be taken into account to ensure that that the production does not result in further land degradation. The existing fiscal incentive/farm concessions programme under the Statutory Rules and Orders #13 for support to the agricultural and rural development sector will be the main 'augment' vehicle under which these recovery efforts will be supported and will also facilitate sustainability of the investments made under the project.

**United Nations Cooperation Framework:** The United Nations coordinated support to Grenada is under *UN Multi-Country Sustainable Development Framework (MSDF)*. The 2022-2026 UN MSDF in the Caribbean[38] includes *Outcome 6 'Caribbean countries manage natural resources & ecosystems strengthening their resilience & enhancing the resilience & prosperity of the people and communities that depend on them'*, which is relevant to the objectives under this project. Under this Outcome Area the UN system will support countries to address the priority area of enhancing Resilience to Climate Change and Sustainable Natural Resource Management, where this project will help remove bottlenecks so that solutions are scaled up for sustainable livelihoods of relevance to the agricultural sector.

The Office of the UN Resident Coordinator with responsibility for Grenada covers Barbados and the Eastern Caribbean. The UN Country Team is based in Barbados and includes within the network, UNEP's Caribbean Sub-Regional Office (CSRO). UNEP participates in the UNCT and works to ensure UNEP-led initiatives align with the Country Implementation Plan and the relevant Multi-Country Sustainable Development Framework (MSDF). During project implementation, UNEP's CSRO based in Jamaica will be kept in close communication to facilitate as relevant and necessary, avenues for building synergies between related initiatives. The CSRO will be furnished with key reports that will include *inter-alia*, annual progress implementation reviews, mid-term reviews and terminal evaluation reports for feedback particularly related to ensuring coherence with wider UN-led initiatives within the Caribbean region. The UN Resident Coordinator's Office has been advised in parallel with the formulation of the project and feedback will be incorporated into further drafts of the project documentation and appropriately incorporated into governance arrangements at implementation.

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[32]

[https://unfccc.int/sites/default/files/resource/Grenada%20Second%20National%20Communication\\_Final%20%281%29%20%281%29.pdf](https://unfccc.int/sites/default/files/resource/Grenada%20Second%20National%20Communication_Final%20%281%29%20%281%29.pdf)

[33]

<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Grenada%20First/Grenada%20INDC.pdf>

[34]

<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Grenada%20Second/GrenadaSecondNDC2020%20-%2001-12-20.pdf>

[35] <https://gov.gd/sites/default/files/docs/Documents/others/nsdp-2020-2035.pdf>

[36] <https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022>

[37] <https://gov.gd/ministry-agriculture-formulates-mitigation-and-response-plan-amidst-coronavirus-pandemic>

[38] <https://caribbean.un.org/en/211222-united-nations-multi-country-sustainable-development-cooperation-framework-2022-2026>

## 8. Knowledge Management

**Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.**

The project will develop a Public Awareness and Public Education (PA/PE) Plan (within Component 2) focusing on relevant environmental issues related to land degradation (LD), sustainable land management (SLM), biodiversity conservation and building resilience of terrestrial ecosystems, such as agriculture to the impacts of climate change and the importance of adopting approaches such as climate-smart agriculture (CSA). The objective of the PA/PE Plan will be to (i) increase the public's knowledge and appreciation of the concepts of sustainable land management (SLM), land degradation (LD), climate-smart agriculture (CSA) and climate change (CC) impacts in Carriacou, (ii) improve the public's understanding to elicit change of attitudes towards SLM, LD, CSA and CC, and (iii) develop and provide key information on project outputs as part of a broader systematization of experiences and lessons learned under the project.

The Public Awareness and Public Education (PA/PE) Plan will be the basis for roll-out of the public education programme for the project. Typical awareness raising, through radio, television, print media and online social media platforms, will be used to target the farmers, land resource users, producer organizations, relevant private sector, schools, and the wider public to ensure that they are aware of the negative impacts economic activities can have on landscapes when because of failure to observe environmentally sound practices. The public education programme will strengthen the technical capacity building program across the project components to promote the SLM/CSA manuals and tools within the scope of offerings to educational institutions, in particular agricultural training programs/colleagues.

The medium chosen to communicate key messages will be based on the target audience as defined in the PA/PE Plan, and will include face-to-face and online sessions, learning-by-doing farmer field schools and field visits to demonstration plots, call-in radio programs, live interviews, press releases, publications, case studies, workshops, informative videos accessible via social media, and posters. The project anticipates to deliver on at least five "signature" knowledge events to showcase progress and innovation under the project.

All communication and knowledge management activities under the project will apply a gender sensitive approach with following principles:

- Use of male and female knowledge product and public education developers for diversity of perspectives and approaches, as well as male and female reviewers of these products.
- Use of gender sensitive language and gender balanced images (women not presented as victims but as agents of change).
- Check context and content (use gender analysis; use convincing gender arguments based on reliable sources and qualitative and quantitative data including sex disaggregated data).
- Refer to the Grenada national Gender Equality Policy and Action Plan (GEPAP) in framing communications content and knowledge management as appropriate.

This project has been formulated based on lessons learned and knowledge gained from existing and prior executed land degradation reduction initiatives and will contribute to Grenada achieving its LDN Targets of which Belle Vue South in Carriacou has been identified as a priority area for intervention. The project will consolidate knowledge gained from field execution compiled in the package of best practices and technologies on SLM and landscape rehabilitation and restoration to be developed through the application of nature-based solutions for erosion control, water and livestock management that is crafted to the local conditions on Carriacou. The value of the knowledge gained from the project will be particularly useful in application to similar micro-landscapes that are highly vulnerable to climate change impacts, but yet are under accelerated degradation due to anthropogenic influences that threaten livelihoods that are supported by maintaining the functional integrity of ecosystems. The package of SLM practices will draw on best practices from regional and global knowledge bases and will be disseminated to farmers and local community residents involved in watershed restoration supported by capacity building via training on use of the identified approaches and technologies. Through stakeholder application, testing and validation, lessons learned will be carefully documented and consolidated in guidelines/handbook(s) to be used as key knowledge resources for further location-specific replication on Carriacou, across Caribbean SIDS, and SIDS at the global level, through various knowledge sharing networks.

In this regard, web-based platforms hosted by both the Ministry of Agriculture and Lands, Fisheries and Cooperatives[39], and the Ministry of Climate Resilience, and the Environment[40] will be avenues for knowledge sharing given that they already maintain information on land management initiatives in the country. An important aspect of the project will be support for the enhancement of regional cooperation and information sharing on issues, data and approaches relevant to land degradation and sustainable land management. To assist this process, knowledge acquired will be fed back through Caribbean-level knowledge platforms such as is being developed under the CSIDS-SOILCARE Phase 1 Project and also through the PISLM online resources[41]. The PISLM is in the process of establishing a regional Information, Communications and Technology (ICT) knowledge hub that will facilitate the sharing of information among countries and with other GEF-supported SLM projects in the sub-region on SLM best practices, successes and failures in implementing SLM-oriented projects and strategies for developing LDN targets linked to Grenada's Land Degradation Neutrality Target Setting Process (LDN-TSP).

The knowledge management approach will be in alignment with the GEF best practice knowledge management approaches[42] so that the project can learn from and share with global community, and all publications developed under this project will comply with the communications policies of the GEF and its partner Agencies.

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[39] <https://www.facebook.com/MOAGrenada/>

[40] <https://www.facebook.com/ClimateEnvGD/>

[41] <https://pislmsids.org/>

[42] <https://www.thegef.org/what-we-do/topics/knowledge-learning>

## **9. Monitoring and Evaluation**

### **Describe the budgeted M and E plan**

The project will follow UNEP's standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Table 4. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.

The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Annex A includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Annex J will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in the Costed M&E Plan below and are fully integrated in the overall project budget.

The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the PISLM to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

The PSC will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility to the Task Manager in UNEP-GEF. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global Environmental benefits will be assessed with the Project Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project



partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

In line with the GEF Evaluation requirements and UNEP's Evaluation Policy, any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. This project, although of a 3-year duration will also be subject to a Mid-Term Review as a useful project management tool for guidance to the PMU and stakeholders. All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review.

In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review's performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report. However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project's operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report. The project's M&E Plan is presented below.

Table 4. Indicative monitoring and evaluation workplan



Type of M&E Activity	Responsible Parties	GEF Budget (USD)	Co-Finance in kind (USD)	Time Frame
Inception Workshop	PISLM	5,000	2,000	Within 2 months of project start-up
Inception Report	PISLM	-	1,000	1 month after project inception meeting
Measurement of project indicators (outcome, progress and performance indicators) including baseline data collection	PISLM International and local Consultants (related project outputs under all components)	1,000	5,000	Outcome indicators: start, mid and end of project  Progress/performance indicators: annually
Standard semi-annual progress reporting and monitoring to UNEP	PISLM	1,000		Within 1 month of the end of reporting period
Monitoring by the Project Steering Committee and advisory technical group of environmental and social risks, and corresponding management plans as relevant	PISLM Government of Grenada ? Ministry of Agriculture and Lands, Fisheries & Cooperatives	5,000	4,000	Once a year minimum
Project Implementation Review (PIR)	PISLM	1,000	4,000	Annually, part of reporting routine
Mid Term Review	UNEP	20,000		At mid-point of project implementation
Terminal Evaluation	UNEP	35,000		Within 6 months of end of project implementation
Project Final Report	PISLM	1,000	3,000	Within 2 months of the project completion date
Co-financing report	Government of Grenada ? Ministry of Agriculture and Lands, Fisheries & Cooperatives PISLM	1,000	2,000	Within 1 month of the PIR reporting period
Project Closing Workshop	Government of Grenada ? Ministry of Agriculture and Lands, Fisheries & Cooperatives PISLM	3,000	9,000	Within one month of project closure
<b>Total M&amp;E Plan cost</b>		<b>73,000</b>	<b>30,000</b>	

## 10. Benefits

**Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?**

The project will target small-holder farmers in target countries in the Caribbean. In particular, it will support the expansion of climate-resilient agriculture to include the increase of the production of targeted organic inputs and greenhouse production, including the introduction of resilient crop systems to potential climatic shocks through the adoption of increasing access to new, stress-tolerant crop varieties and/or more nutritious staple crop foods. The project is expected to increase agricultural yield, reduce soil erosion, enhance water quality and quantity, and improve the income and food security of at least 1,500 beneficiaries.

At the national level, the project will benefit competent national organizations for the promotion of women's rights. The Grenada National Organization of Women (GNOW) will sit on the Project Steering Committee. This organization will ensure that the Executing Agency works with communities and organizations, as may be necessary, to ensure gender equity in participation of women in project activities and to help ensure that the socioeconomic benefits resulting from project activities under Components 1 and 2 impact equally on the lives of woman. Similarly, representatives of the Caribbean Association for Youth Development (CAYD) will perform similar functions to ensure the projects benefit them by providing training, inputs and ensuring that extension services provide adequate backstopping.

The project will also benefit the Carriacou Farmers Association (CFA) who will participate by providing inputs on sustainable agricultural approaches that could be promoted by the project, and on the best delivery mechanisms for those approaches. Significant capacity building will be provided to farmers' organizations to ensure that they improve their production practices while protecting the environment and becoming more resilient to climate change.

Finally, the proposed project will support national efforts to build-back better after continuous climate induced disasters and the COVID-19 pandemic by (i) investing in better preparedness including improving climate risk assessment and land suitability assessments which will in turn support better decision-making by planners and target farmers, (ii) by investing in the restoration of land and natural resources in order to increase resilience, (iii) by investing in improving the soil monitoring and assessment capacity in the region, which will in turn support better investments in the field; (iv) by exploring financing mechanisms and resource mobilization strategies that will support the implementation of climate resilient and

productivity enhancing activities; and finally (v) the project will play a key role in enabling the participating countries to build back better in the post COVID-19 pandemic era through the creation of green jobs and strengthening sustainable food security.

## 11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

### Overall Project/Program Risk Classification \*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Medium/Moderate		

#### Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

<https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:cb2d7974-887b-31f6-9c3e-25663e3bcecd>

#### Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
<b>Annex O - ENVIRONMENTAL AND SOCIAL SAFEGUARDS MANAGEMENT FRAMEWORK (AND CLIMATE SCREENING)</b>	<b>CEO Endorsement ESS</b>	

Title	Module	Submitted
<b>Annex N - SAFEGUARD RISK IDENTIFICATION FORM</b>	<b>CEO Endorsement ESS</b>	
<b>ANNEX N</b>	<b>CEO Endorsement ESS</b>	
<b>CRC SRIF SLM Grenada CC 2</b>	<b>Project PIF ESS</b>	

**ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).**

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumption
<b>Project Objective:</b> To effectively address land degradation in Carriacou, through demonstration and application of ecosystems-based landscape restoration, sustainable land management and good agricultural practices, using community participatory approaches that expands diversification and sustainability of livelihoods options.						
<b>Component 1: Community-Based Landscape Rehabilitation and Protection using EbA approaches</b>						
<b>Outcome 1.1:</b> Stakeholders supported to rehabilitate landscapes at Bellevue South Dumfries (designated hotspots under the LDN target-setting programme) by applying EbA solutions	(i) % of restoration target area that incorporate climate-resilient SLM and restorative measures based on nature-based solutions that serve as demonstrations to stakeholders  (ii) # of water conservation installations where communities have adopted functioning maintenance schemes	Stakeholders with limited capacity to apply EbA tools and methods to arrest land degradation  No water augmentation capacity	Stakeholders effectively applying EbA tools and methods over 50% of target area  5 water storage systems at 67% capacity under maintenance scheme	Stakeholders effectively applying EbA tools and methods over 100% of target area  5 water storage systems operational at full capacity under maintenance scheme	? Field assessment reports ? Propagation facility production inventory ? Water storage facility operation and utilization reports	? Buy-in among farmer and community beneficiaries, private sector and institutional collaborators; landowners will cooperate and provide access to their lands ? Stakeholders participate in training provided and adopt tools, technologies, methodologies, and practices ? Human and financial resources made

Outcomes/output s	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumption
<b>Output 1.1.1:</b> <i>Plant propagation facility established for the multiplication of planting material to support land restoration by farmers and community members.</i>	(i) Number of plant propagation facilities operational  (ii) Nursery production capacity - number of plants	0  0	0  20,000 seedlings	1  36,000 seedlings	? Marketing strategy /client needs report ? Propagation facility design report ? Contract award document for nursery installation ? Facility installation completion report ? Planting material inventory ? Operator training report	available to sustain operation and maintenance of project investments ? Technical partnerships supporting the project beneficiaries will continue post-project ? Adaptive measures can be successfully implemented with the occurrence of natural disasters (notably hurricanes) post-project ? Extreme events will not result in disruption of institutional and project delivery processes, loss or compromise of field and relevant adaptive mechanisms will be effected ? Influence s of the COVID-19 pandemic can be effectively mitigated ?
<b>Output 1.1.2:</b> <i>Degraded grassland lands and agricultural lands rehabilitated or restored at Bellevue South and Dumfries through improved soil and land conservation measures implemented by farmers and community members.</i>	(i) Area of productive landscapes that incorporate climate-resilient SLM and restorative NbS (ha) <b>[Core indicator 3]</b>  (ii) Metric tons CO2 directly mitigated as a result of project interventions (restoration and best practice under Output 2.1.2) <b>[Core indicator 6]</b>	0  0	125 ha  50% (end of project target) value	250 ha  76,656 tCO2-eq within 3 years	? Restoration management plan ? Research reports ? fodder establishment ? Field progress reports ? Digital mapping and of restoration work ? Carbon sequestration report measuring emissions mitigated	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumption
<b>Output 1.1.3:</b> Five water conservation installations to enhance moisture retention at sites restored by farmers and community members.	(i) Number of new water storage facilities installed.	0	2	2	? Water use assessment	
		0	3	3	? Water system design specs	
	(ii) Number of water storage facilities restored	0	2000m3	3000m3	/ procurement plan	
	(iii) Volume of additional water storage available for irrigation (m3)				? Contract award(s) document for storage installation	
					? Field progress reports	
					? water use monitoring	
					? User maintenance training reports	
<b>Outputs:</b>						
<b>Output 1.1.1:</b> One plant propagation facility for multiplication of planting material to support land restoration by farmers and community members.						
<b>Output 1.1.2:</b> At least 250 ha restored grasslands, agricultural lands at Bellevue South Dumfries through improved soil and land conservation measures implemented by farmers and community members.						
<b>Output 1.1.3:</b> Four water conservation installations to enhance moisture retention at sites restored by farmers and community members.						
<b>Component 2: Strengthening landscape governance for application of SLM and EbA tools</b>						

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumption
<p><b>Outcome 2.1:</b> Uptake of SLM and EbA tools and methods leads to strengthened local governance, coordination and capacity for integrating EbA restoration solutions within productive landscapes by key stakeholders from government agencies, farmers and the community</p>	<p>(i) Coordination mechanisms for SLM in Carriacou adopted by stakeholders;</p> <p>(ii) Increase in adoption of SLM and climate smart measures by farmers and stakeholders with 50/50 gender parity (based on field assessment surveys);</p> <p>(iii) Protocol for SLM/savanna land mgmt. endorsed by the local community.</p>	<p>No SLM coord. mechanism</p> <p>SLM and CC-smart practices not in use</p> <p>No protocols for pasture mgmt</p>	<p>SLM coord. mechanism in place</p> <p>SLM techniques in practice by 450 farmers (50/50 gender parity)</p> <p>Protocol for pasture mgmt. in place</p>	<p>Mechanism fully adopted and in practice</p> <p>SLM techniques in practice by 750 farmers 50/50 gender parity</p> <p>Protocol for pasture mgmt. in place fully adopted</p>	<p>? Field assessment surveys</p> <p>? Training reports (incl. trainee feedback)</p> <p>? KPA survey reports (before and after)</p> <p>?</p>	<p>? Buy-in among farmer and community beneficiaries, private sector and institutional collaborators; landowners will cooperate and provide access to their lands</p> <p>? Stakeholders participate in training provided and adopt tools, technologies, methodologies, and practices</p> <p>? Strong local government support to facilitate planning and development that integrates SLM principles</p> <p>? Technical partnerships supporting the project beneficiaries will continue post-project</p> <p>? Adaptive measures can be successfully implemented with the occurrence of</p>
<p><b>Output 2.1.1:</b> <i>Effective local coordination mechanism for SLM including co-management protocols for savannah grass lands for implementation by local government agencies, farmers, livestock owners and the local community</i></p>	<p>(i) Local stakeholder SLM management committee established (50/50 gender parity)</p> <p>(ii) No. co-management protocols established for savannah grass lands</p>	<p>Does not exist</p> <p>0</p>	<p>1 mechanism established</p> <p>1</p>	<p>1 mechanism fully functional</p> <p>1</p>	<p>? Community engagement plan</p> <p>? Co-mgmt agreement framework for sust. livestock mgmt.</p> <p>? Meeting records</p> <p>? Exit and sustainability strategy</p>	<p>? Technical partnerships supporting the project beneficiaries will continue post-project</p> <p>? Adaptive measures can be successfully implemented with the occurrence of</p>



Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumption
<b>Output 2.1.2:</b> <i>Package of gender-sensitive SLM approaches / technologies and training events for uptake and application over 635 ha by farmers and community beneficiaries and made available through online knowledge platforms</i>	(i) Number of SLM packages developed	0	8	8	? Training resource manual / resource packages	natural disasters (notably hurricanes) post-project ? Influences of the COVID-19 pandemic can be effectively mitigated
	(ii) Number of trainers trained; 50/50 gender parity [Core indicator 11]	0	400	750	? Training reports (incl. trainee feedback) ? Project field monitoring reports ?	
	(iii) Number of farmers and other stakeholders trained; 50/50 gender parity [Core indicator 11]	0ha	300 ha	635 ha		
	(iv) Area of land SLM practices extended to over Carriacou (ha) [Core indicator 4]					
<b>Output 2.1.3:</b> <i>Public awareness and education plan implemented targeting farmers, school children and the community.</i>	(i) Number core information products	0	5	10	? Public Awareness and Public Education Plan	
	(ii) Number of ?signature? knowledge events (attendance tracked by gender)	0	2	5	? KPA survey reports (before and after) ? Resources produced and made available ? Event reports / proceedings	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumption
<b>Output 2.1.4:</b> <i>Gender Sensitive Monitoring and Evaluation Framework in Support of Project Implementation</i>	(i) Gender-sensitive M&E system is established and approved by UNEP	0	1	1	? Project management reports ? M&E records; Half-year progress reports, PIRs ? Mid-term Review and Terminal Evaluation	M&E system established early in project implementation
<p><b>Outputs:</b></p> <p><b>Output 2.1.1:</b> Effective local coordination mechanism for SLM including co-management protocols for savannah grass lands for implementation by local government agencies, farmers, livestock owners and the local community</p> <p><b>Output 2.1.2:</b> Package of gender-sensitive SLM approaches /technologies and training events for uptake and application over 635 ha by farmers and community beneficiaries and made available through online knowledge platforms.</p> <p><b>Output 2.1.3:</b> Public awareness and education plan implemented targeting farmers, school children and the community.</p> <p><b>Output 2.1.4:</b> Gender Sensitive Monitoring and Evaluation Framework in Support of Project Implementation</p>						

**ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).**

PIF Text	CEO ER Text	Explanation for changes
Output 1.1.3: Four water conservation installations to enhance moisture retention at sites restored by farmers and community members	Output 1.1.3: <u>Five</u> water conservation installations to enhance moisture retention at sites restored by farmers and community members	During the PPG phase, in-field investigation and consultations with stakeholders allowed for final determination of the number of water storage investments that will be feasible from four to five

PIF Text	CEO ER Text	Explanation for changes
<p><b>Outcome 1.1</b> Landscapes rehabilitated at Bellevue South and Dumfries (designated hotspots under the LDN target-setting programme) by stakeholders applying EbA solutions</p> <p><i>Indicator(s): (i) Area (in ha) of productive landscapes that incorporate climate-resilient SLM and restorative measures based on nature-based solutions that serve as demonstrations to stakeholders; (ii) volume in m3 of additional water storage available for land restoration</i></p> <p><b>Outcome 2.1</b> Strengthened local governance, coordination and capacity for integrating EbA restoration solutions within productive landscapes by key stakeholders from government agencies, farmers and the community</p> <p><i>Indicators: (i) No. of coordination mechanisms for SLM in Carriacou adopted by stakeholders; (ii) Increase in adoption of SLM and climate smart measures by farmers and stakeholders within land holdings based on field assessment surveys; (iii) No. of farmers and stakeholders trained disaggregated by gender; (iv) No. of protocols for SLM/savanna land mgmt. endorsed by the local community.</i></p>	<p><b>Outcome 1.1</b> <u><b>Stakeholders supported to rehabilitate</b></u> landscapes at Bellevue South Dumfries (designated hotspots under the LDN target-setting programme) by applying EbA solutions</p> <p><i>Indicators: (i) <u>% of restoration target area that incorporate climate-resilient SLM and restorative measures based on nature-based solutions that serve as demonstrations to stakeholders</u>; (ii) <u># of water conservation installations where communities have adopted functioning maintenance schemes</u></i></p> <p><b>Outcome 1.1</b> <u><b>Uptake of SLM and EbA tools and methods leads to</b></u> strengthened local governance, coordination and capacity for integrating EbA restoration solutions within productive landscapes by key stakeholders from government agencies, farmers and the community</p> <p><i>Indicators: (i) <u>Coordination mechanism for SLM in Carriacou adopted by stakeholders</u>; (ii) <u>Increase in adoption of SLM and climate smart measures by farmers and stakeholders within land holdings (based</u></i></p>	<p>Outcome statements revised to read less like output statements and reflect more specificity and higher result-level ambition that the project will trigger, with emphasis on how stakeholders are empowered and apply the tools and investments to address land degradation. The indicators were adjusted accordingly.</p>

PIF Text	CEO ER Text	Explanation for changes
	<i>on field assessment surveys); (iii) <b>Protocol for SLM/savanna land mgmt. endorsed by the local community.</b></i>	
<b>Original GEF component budgets</b> Component 1: \$600,346 Component 2: \$184,420  <b>Original Co-financing component budgets</b> Component 1: \$2,000,000 Component 2: \$605,000 Project Management Cost: \$280,000	<b>Changes in GEF component budgets</b> Component 1: \$552,266 Component 2: \$232,500  <b>Changes in GEF component budgets</b> Component 1: \$1,965,000 Component 2: \$107,000 Project Management Cost: \$158,000	The PPG phase allowed for more detailed evaluation of the activity costs by component.

PIF Text	CEO ER Text	Explanation for changes
<p><b>Table C Indicative Sources of Co-financing</b></p> <ol style="list-style-type: none"> <li>1. Ministry of Agriculture, Lands and Forestry: \$850,000</li> <li>2. Ministry of Agriculture, Lands and Forestry \$555,000 (grant)</li> <li>3. Forestry and National Parks Department: \$500,000</li> <li>4. Ministry of Carriacou and Petit Martinique Affairs: \$650,000</li> <li>5. Carriacou Farmers Association: \$30,000</li> <li>6. PISLM Secretariat: \$100,000</li> <li>7. Inter-American Institute for Cooperation on Agriculture (IICA): \$100,000</li> <li>8. University of the West Indies (UWI), Faculty of Food and Agriculture, Dept of Soil Science, St Augustine Campus: \$100,000</li> </ol>	<p>The overall project co-financing amount <b>adjusted from \$2,885,000 to \$2,230,000</b>. The following are the changes:</p> <ol style="list-style-type: none"> <li>1. Ministry of Agriculture and Lands, Fisheries &amp; Cooperatives: <b>revised</b> to overall amount of <b><u>\$1,350,000</u></b>.</li> <li>2. Ministry of Agriculture and Lands, Fisheries &amp; Cooperatives (grant) under the Grenada Government Farm Labour Support Programme: <b><u>co-financing not secured (to project submission)</u></b></li> <li>3. Forestry and National Parks Department: \$500,000 is included in the amount of \$1,350,000 under the Ministry of Agriculture listed above at #1</li> <li>4. Ministry of Carriacou and Petit Martinique Affairs: <b>unchanged at \$650,000</b></li> <li>5. Carriacou Farmers Association: <b>unchanged at \$30,000</b></li> <li>6. PISLM Secretariat: <b>revised up to \$200,000</b></li> <li>7. Inter-American Institute for</li> </ol>	<p>The Ministry of Agriculture and Lands, Fisheries &amp; Cooperatives provided a co-financing letter that integrated the amount of the Forestry Department within the overall amount. The total amount of co-financing remains unchanged (\$850,000 for the Ministry of Agriculture and Lands, Fisheries &amp; Cooperatives and \$500,000 that was listed under Forestry and National Parks Department)</p> <p>The co-financing commitment associated with the Grenada Government Farm Labour Support Programme was not received hence the amount was removed from the project budget. The proponents have advised that the programme is ongoing and will be incorporated within the co-financing contributions (and reporting) during project execution.</p> <p>The PISLM Secretariat has committed additional co-financing based on institutional capacity means.</p> <p>IICA and UWI remain committed to the project implementation and will be providing technical expertise to the project and is anticipated that co-financing to the equivalent amount as identified at PIF stage will be forthcoming in project implementation and will be reported accordingly.</p> <p>The adjustment in the overall co-financing is not anticipated to significantly impact implementation as the agencies/programmes will remain engaged during implementation.</p>

PIF Text	CEO ER Text	Explanation for changes
	<p>Cooperation on Agriculture (IICA): <u>co-financing not secured (to project submission)</u></p> <p>8. University of the West Indies (UWI), Faculty of Food and Agriculture, Department of Soil Science, St Augustine Campus: <u>co-financing not secured (to project submission)</u></p>	
<p><b>Core indicator 3</b> 3.1 Area of degraded agricultural land restored: 250 ha.</p>	<p><b>Revised Core indicator 3</b> Indicator 3.1 Area of degraded agricultural land restored: 125 ha. Indicator 3.3 Area of natural grass and shrublands restored: 125 ha.</p>	<p>The estimated hectares of land to be restored was derived from field assessment that was then cross-referenced against Google Earth imagery over the most severely degraded areas that are easily recognized in the satellite imagery (heads-up polygon trace against the imagery). The estimate of agricultural land to be restored is 125 ha (sub-indicator 3.1) and the estimate of the grasslands (sub-indicator 3.3) to be restored is 125 ha. This was derived based on the following: of the main land use types on Carriacou, annual crops account for an estimated 22% of the overall target area of the project (885 ha), perennial crops 28%, and grasslands 50%. This ratio was therefore applied over the 250-ha restoration target, where the annual and perennial crop covers were combined (50%) and the grasslands (50%).</p>

**ANNEX C: Status of Utilization of Project Preparation Grant (PPG).**

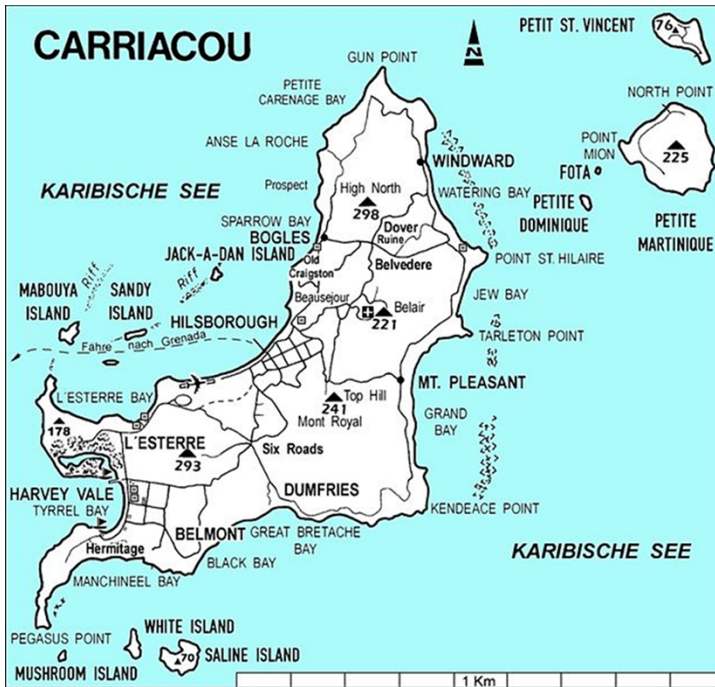
**(Provide detailed funding amount of the PPG activities financing status in the table below:**

PPG Grant Approved at PIF: 50,000			
Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed

Expert assessment on SLM and communication/KM	43,000	17,000	26,000
Consultation process meetings and travel	2,500	1,500	1,000
Workshops	3,000	1,500	1,500
Communication, dissemination, translation, data, miscellaneous	1,500	0	1,500
<b>Total</b>	<b>50,000</b>	<b>20,000</b>	<b>30,000</b>

### ANNEX D: Project Map(s) and Coordinates

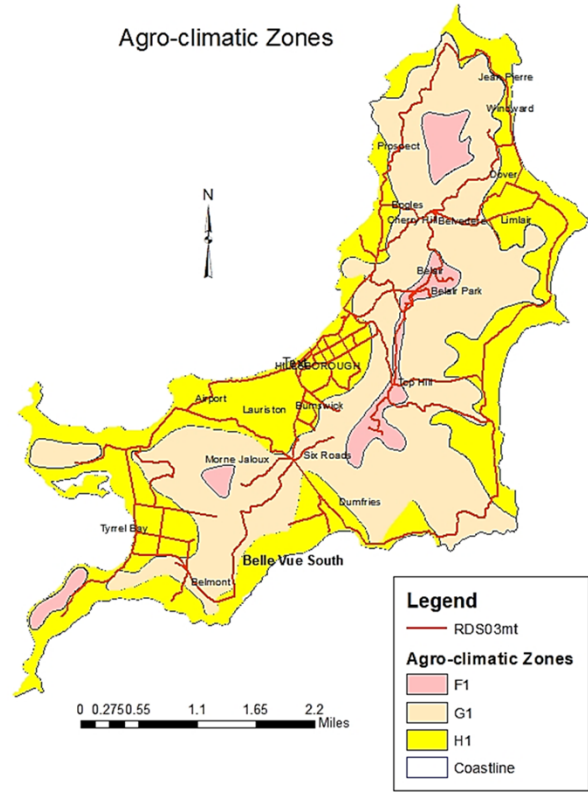
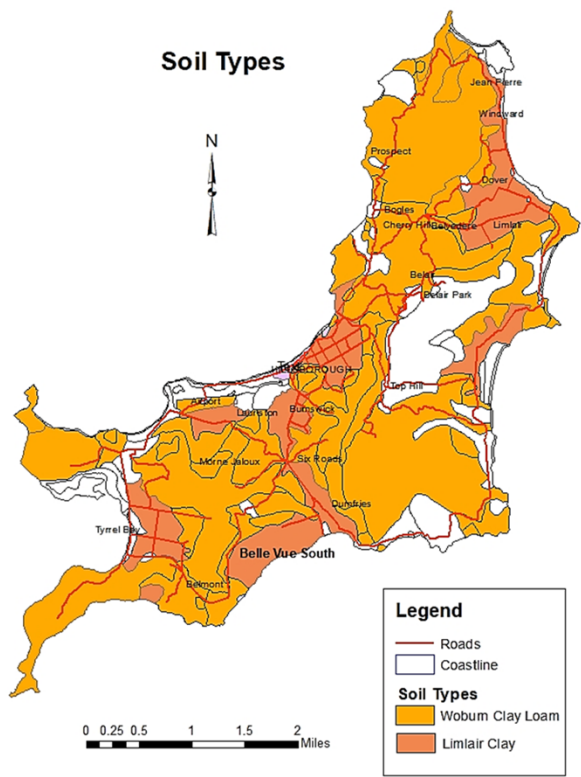
Please attach the geographical location of the project area, if possible.



<https://commons.wikimedia.org/wiki/File:Carriacou.JPG>

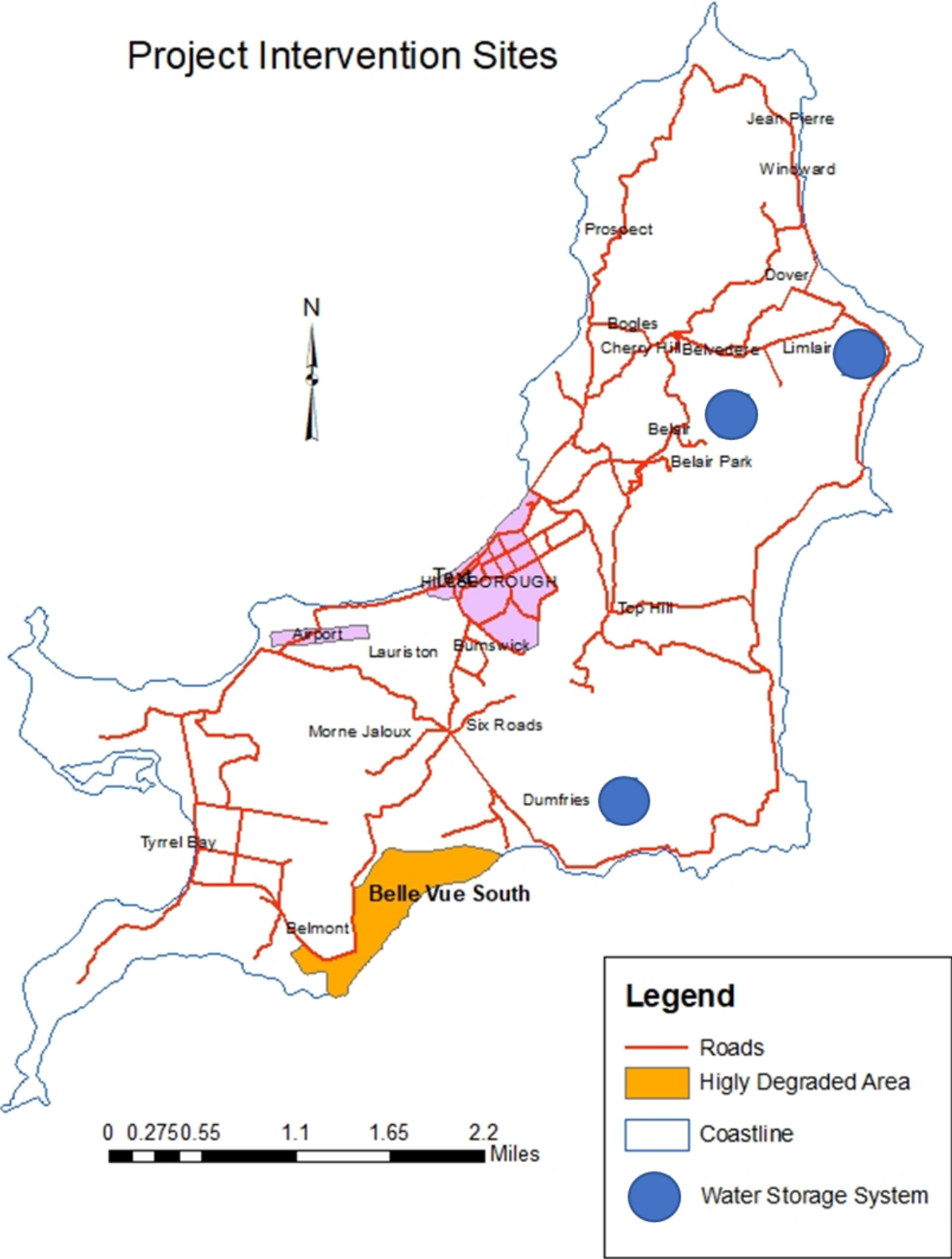
Carriacou watersheds







# Project Intervention Sites



ANNEX E: Project Budget Table

## Please attach a project budget table.

GEF ID: 10980 Enhancing Land Management and Strengthening Ecosystem Resilience for Integrated Landscape Restoration and Climate-Resilient Food Systems in Carriacou, Grenada								
Appendix H-1: Indicative GEF Project Budget								
Expenditure Category UNEP Budget code	Detailed Description (activities)	Component (\$US)		Sub-Total	M&E	PMC	Total (\$US)	Responsible Entity  (Executing Entity receiving funds from the GEF Agency) [1]
		COMP 1	COMP 2					
		Outcome 1.1	Outcome 2.1					
<b>Works</b>							0	
2301	Plant propagation station - construction, equipment, materials	90,000		90,000			90,000	PISLM
2301	Water storage facilities - installation, equipment, materials	110,000		110,000			110,000	PISLM
<b>Goods</b>								
2301	SLM landscape installations - Equipment and materials (1.1.2)	119,500		119,500			119,500	PISLM
<b>Sub-contract to executing partner/ entity</b>								
2301	PISLM RAC/NAT Facility	74,766		74,766			74,766	PISLM
<b>Contractual Services – Company</b>								
2301	Media products - On-ground restoration investments (1.1.4)	10,000		10,000			10,000	PISLM
2301	Media products - Rehab of water supply systems (1.1.3)	10,000		10,000			10,000	PISLM
2301	Media products - Sustainable livestock mgmt (2.1.1)		5,000	5,000			5,000	PISLM
2301	Media products - 8 best practice SLM gender-sensitive		8,000	8,000			8,000	PISLM
2301	Media products - Package of SLM gender-sensitive		7,000	7,000			7,000	PISLM
2301	Media products - Implement PA/PE Plan (2.1.3)		10,000	10,000			10,000	PISLM
								PISLM
<b>International Consultants</b>								
5303	Mid-Term Review			0	20,000		20,000	PISLM
5303	Terminal Evaluation			0	35,000		35,000	UNEP
	...							
<b>Local Consultants</b>								
1202	Agri/Land Management Expert	30,000		30,000			30,000	PISLM
1202	Communications and Knowledge Management Specialist		20,000	20,000			20,000	PISLM
1202	Gender and Social Safeguard Specialist		25,000	25,000			25,000	PISLM
1202	Water Resource Specialist	30,000		30,000			30,000	PISLM
5202	Audits (1 per year)			0		18,000	18,000	PISLM
<b>Salary and benefits / Staff costs</b>								
1101	Project Coordinator	11,500	11,500	23,000	5,000	54,000	82,000	PISLM
1120	Admin Assistant			0	0	6,000	6,000	PISLM
<b>Trainings, Workshops, Meetings</b>								
3201	Train propagation facility operators (1.1.1)	5,000		5,000			5,000	PISLM
3201	Train water system operators (1.1.3)	5,000		5,000			5,000	PISLM
3201	Train Trainers in various SLM gender-sensitive technologies /		15,000	15,000			15,000	PISLM
3201	Train stakeholders SLM gender-sensitive practices over 635		30,000	30,000			30,000	PISLM
3301	Inception Workshop			0	5,000		5,000	PISLM
3301	Workshop - Validate stakeholder Engagement Plan (1.1.2)	50,000		50,000			50,000	PISLM
3301	Workshop - Develop framework SLM governance mechanism		5,000	5,000			5,000	PISLM
3301	Workshop - findings of KAP; design PA/PE Plan (2.1.3)		10,000	10,000			10,000	PISLM
3301	Workshop - share findings and lessons learned (2.1.3)		10,000	10,000	3,000		13,000	PISLM
3301	Project Steering Committee + Scientific Advisory Board Meetings			0	5,000		5,000	PISLM
<b>Travel</b>								
1601	Oversight trips for the project	6,500	3,000	9,500			9,500	PISLM
<b>Office Supplies</b>								
	Office Supplies			0			0	
<b>Other Operati</b>								
	Office Rent			0			0	
	Communications ( telephone - Internet)			0		476	476	PISLM
<b>Grand Total</b>		<b>552,266</b>	<b>159,500</b>	<b>711,766</b>	<b>73,000</b>	<b>78,476</b>	<b>863,242</b>	

### ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template

provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

**ANNEX G: (For NGI only) Reflows**

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

**ANNEX H: (For NGI only) Agency Capacity to generate reflows**

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).