GEF-8 REQUEST FOR CEO ENDORSEMENT/APPROVAL

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General Project Information

Project Title	
CSIDS SOILCARE Phase 2 - Caribbean Small Islands Developing States (SIDS) multi-country soil management initiative for integrated Landscape Restoration and climate-resilient food systems	
Region Latin America and the Caribbean	GEF Project ID 11390
Country(ies) Regional Antigua and Barbuda Bahamas Barbados Belize Dominica Grenada Guyana Haiti Jamaica St. Kitts and Nevis St. Lucia St. Vincent and Grenadines Suriname Trinidad and Tobago	Type of Project FSP
GEF Agency(ies): FAO	GEF Agency Project ID 745187
Project Executing Entity(s) The Partnership Initiative for Sustainable Land Management in Caribbean SIDS (PILSM)	Project Executing Type Others
GEF Focal Area (s) Land Degradation	Submission Date 8/14/2025
Type of Trust Fund GET	Project Duration (Months) 60
GEF Project Grant: (a) 17,968,099.00	GEF Project Non-Grant: (b) 0.00
Agency Fee(s) Grant: (c) 1,617,117.00	Agency Fee(s) Non-Grant (d) 0.00

Total GEF Financing: (a+b+c+d)	Total Co-financing
19,585,216.00	25,652,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
299,995.00	26,990.00
Total GEF Resources: (a+b+c+d+e+f)	
19,912,201.00	

Project Tags

CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No

Project Sector (CCM Only)

Taxonomy

Focal Areas, Land Degradation, Land Degradation Neutrality, Carbon stocks above or below ground, Land Productivity, Land Cover and Land cover change, Strengthen institutional capacity and decision-making, Influencing models, Stakeholders, Private Sector, Strategic Communications, Communications, Beneficiaries, Indigenous Peoples, Local Communities, SMEs, Individuals/Entrepreneurs, Participation, Type of Engagement, Partnership, Academia, Civil Society, Community Based Organization, Gender-sensitive indicators, Gender Mainstreaming, Gender Equality, Gender results areas, Capacity Development, Awareness Raising, Access to benefits and services, Access and control over natural resources, Knowledge Generation and Exchange, Learning, Capacity, Knowledge and Research, Theory of change, Innovation, Sustainable Land Management, Restoration and Rehabilitation of Degraded Lands, Drought Mitigation, Improved Soil and Water Management Techniques, Income Generating Activities, Community-Based Natural Resource Management

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Principal Objective 2	Significant Objective 1	Principal Objective 2

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. (max. 250 words, approximately 1/2 page)

Land and soil degradation continues to be a major environmental concern and issue in Caribbean Small Island Developing States (CSIDS). Hence these countries commitment to honoring their obligations under the United Nations Convention to Combat Desertification (UNCCD), including their endorsement of the vehicle—Land Degradation Neutrality (LDN)— agreed to by the international community at the UNCCD COP 12 in Ankara, Turkey, 12 – 23 October 2015, for contributing to the achievement of SDG 15.3. Closely related is the issue of food and nutrition security, which was underscored as a major area of concern by the COVID-19 pandemic. These concerns are exacerbated by climate change and underscore the need to embrace and apply scientific and technological options to address land and soil degradation in CSIDS.

SOILCARE Phase 1 provided the basic, but solid, foundation for enhancing CSIDS capability to address land and soil degradation, including setting the basis for operationalizing Land Degradation Neutrality; CSIDS-SOILCARE Phase 2 will extend its scope to include the other CSIDS not involved in Phase 1 and move all beneficiary countries to LDN. The principal objective of CSIDS-SOILCARE Phase 2 is to strengthen CSIDS with the necessary tools for adopting and implementing measures, policies, and legal and institutional frameworks to achieve LDN and climate resilience. It is structured around five (5) components, vis a vis:

1. The updating of soil information and data as a basis of strengthening Sustainable Soil Management (SSM), Sustainable Land Management (SLM) and LDN in CSIDS

2. The design and implementation of strategic interventions in CSIDS for addressing the rehabilitation of degraded lands in support of the attainment of LDN

3. Strengthening the capability of CSIDS to manage soil, land and land water resources to combat the impacts of droughts and flooding through LDN

4. Enhancing food systems and alternative livelihoods supported by transformative financial systems that involve the private sector, towards LDN

5. Strengthening the scientific and technical infrastructure and capacity of CSIDS to enhance sustainable and climate resilient soil and land management for LDN and food security.

CSIDS-SOILCARE Phase 2 will be implemented in the 14 GEF-eligible English/French Caribbean Community (CARICOM) countries and will be multi-sectoral in scope. The areas of implementation have been selected from the ones prioritized in the countries' LDN Target Setting Processes and PRAIS reports. In total, the project will (i) restore 1,780 hectares (ha) of croplands, rangelands and forests in the target countries;
(ii) improve management of nearly 11,692.9 ha of land, including in productive landscapes; (iii) mitigate 1,250,867 metric tons of carbon dioxide equivalent (tCO2e) of Greenhouse gas (GHG) emissions; iv) reduce the use of agrochemicals in 1.45 tons, and v) benefit at least 9,390 individuals directly (3,776 women).

Environmental co-benefits will be delivered in the form of increased biodiversity, climate change mitigation and enhanced water resources, thus contributing to the countries' commitments under various multilateral environmental agreements. Adaptation co-benefits will be materialized as reduced ecological and social vulnerability to climate stresses such as drought. The project will also provide socio-economic benefits, in meeting Principle 2 of the LDN framework on protecting human rights and enhancing human well-being. These primarily consist of improved food security and livelihoods, through the provision of enhanced and resilient production systems and value chains, with synergies created between the production sector and other industries. Other socio-economic and cultural co-benefits will also be obtained through the promotion of traditional knowledge and indigenous technologies, and through greater empowerment of local communities, particularly to women and youth, with gender and age- sensitive strategies embedded in all the project activities. The main project outcomes are as follows:

Outcome 1.1: Caribbean countries have **improved capacity to monitor and report on LDN**, including the use of soil data to make informed decisions and contribute to regional and global soil and climate knowledge systems.

Outcome 2.1: Small-scale farmers and other stakeholders in Caribbean countries **implement selected proven interventions to avoid, reduce, and reverse land degradation** to achieve LDN.

Outcome 3.1: Enhanced **integrated land planning strategies based on SLM and SSM** to reduce flood and drought risks and for mitigation are available to Governments and stakeholders in Caribbean countries.

Outcome 4.1: Governments and stakeholders in Caribbean countries **leverage financing of SSM and SLM based production** for LDN and climate resilience.

Outcome 5.1: The **scientific, technical and knowledge-transfer capacity** of CSIDS for **SSM and SLM-based innovations in agriculture is enhanced** in support of LDN at the national and regional scales.

Outcome 5.2: The **LDN approach is mainstreamed** in relevant regional policy frameworks as a cross-cutting intersectoral principle.

SOILCARE Phase 2 is intended to be both innovative and transformative, through use of a multiscale approach that combines regional aspects with a range of sub-national characteristics, providing multiple pathways for impact. All the four (4) transformational levers listed in the GEF-8 Programming Directions are embedded in the project's components – governance and policies (component 5), financial leverage (component 4), innovation and learning (component 5 in synergy with the other project components), and multi-stakeholder dialogues (components 2, 3 and 4) – aiming to enable and foster behavioral change towards SSM and SLM and trigger transformational shifts, for a region-wide climate-resilient developmental strategy towards LDN in the Caribbean.

Project Description Overview

Project Objective

To strengthen Caribbean SIDS with the necessary tools for adopting and implementing measures, policies, and legal and institutional frameworks to achieve Land Degradation Neutrality LDN and Climate Resilience.

Project Components

Component 1: Updating soil information and data as basis for a strengthened decision making on LDN and resilience to climate change impacts.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
3,999,250.00	5,698,132.00

Outcome:

1.1 Caribbean countries have improved capacity to monitor and report on LDN, including the use of soil data to make informed decisions and contribute to regional and global soil and climate knowledge systems.

Indicators:

- *14 countries using the* Decision Support System *(DSS) for land use planning and reporting.*
- *14 National soil labs implementing standardized QA/QC measures.*
- *50 external authorized users accessing library data*
- *Three (3) regional (CARICOM, Organisation of Eastern Caribbean States (OECS) policies/decisions that have considered Caribbean Soil Information System (CARSIS) information*

CI11: 200 direct beneficiaries from GEF interventions (100 women)

Output:

1.1.1 Infrastructure and technical skills assessed and upgraded for laboratories under Caribbean Soil Laboratory Network (CARSOLAN)

1.1.2 National maps of soil properties produced for Phase 2 new countries

1.1.3 Phase 2 new countries integrated within Regional and Global Soil Information Systems.

1.1.4 LDN DSS incorporating soil information expanded to Phase 2 new countries

1.1.5 Caribbean soil archive and data library established.

Component 2: Rehabilitation of degraded lands prioritized through national land degradation neutrality target setting process (LDN-TSP) to achieve land degradation neutrality (LDN).

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
3,263,488.00	4,649,818.00

Outcome:

2.1 Land degradation avoided, reduced and reversed through implementation of selected SSM and SLM strategies.

Indicators:

- *CI3: 1,780 ha of croplands, rangelands and forests restored (600 direct + 1190 indirect)*
- *CI4: 8,040 ha of landscapes under improved practices (2,820 direct and 5,220 indirect)*
- *CI6: 983,391 tCO2e of reduced emissions (20 years; CI 6.5: 386,979 tCO2e; CI6.6: 596,412 tCO2e)*
- *CI9: 1.45 tons of pesticides reduced/avoided*
- *CI11: 1,330 direct beneficiaries from GEF interventions (532 women, 333 youth)*

10 % Increase in productivity (remote sensing, NDVI) in demonstration sites

Output:

2.1.1 SSM and SLM best practices implemented in forest, rangeland and cropland demonstration sites.

2.1.2 SSM strategies to optimize agricultural inputs (fertilizers and pesticides) implemented and monitored in cropland demonstration sites.

2.1.3 Participatory gender-inclusive, and context-specific strategic land management plans produced for the implementation areas and integrated into national DSS.

Component 3: Strengthening CSIDS capability to combat flooding and drought through soil, land, and water management for LDN

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
1,973,274.00	2,811,521.00

Outcome:

3.1. Caribbean countries have increased capacity for drought and flood risk mitigation based on evidence-based sustainable land/soil management and drought-smart land and water management

Indicators:

- *CI4: 2,520 ha with improved drought/flood management capacity*
- *CI6: 265,822 tCO2e of reduced emissions (20 years; CI 6.5: 182,151 tCO2e; CI6.6: 83,671 tCO2e)*

CI11: 860 beneficiaries (344 women, 215 youth)

Output:

3.1.1. Program to enhance monitoring, forecasting and risk assessment capacities of the Caribbean Drought and Precipitation Monitoring Network (CDPMN) implemented

3.1.2. SSM and SLM based drought-smart land and water management implemented and monitored in demonstration sites as part of the Small Farmers Drought Migration Scheme

3.1.3. Watershed scale plans to replicate and scale out the Small Farmers Drought Migration Scheme drought-smart options produced

3.1.4. National-scale integrated planning approaches for drought and flood risk mitigation developed and adopted

Component 4: Enhancing Food Systems and Alternative Livelihoods supported by transformative financial systems that involves the private sector.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
2,940,502.00	4,189,628.00

Outcome:

4.1. SSM and SLM based business strategies are scaled out through accessible financing and improved market access for LDN and climate resilience

Indicators:

- *100 % of target Transformative Funding Mechanism (TFM) work program allocated yearly*
- *CI11: 1,000 beneficiaries (400 women)*

Output:

4.1.1. LDN TFM capitalized and operational

4.1.2 Youth Innovation and Agricultural Development Initiative (YARDI) based on SLM and SSM implemented in rural communities of Trinidad and Tobago and Guyana

4.1.3 Youth Agri-business initiative (YABI) towards CARICOM 25x25 vision implemented

Component 5: Enhancing scientific and technical capacities, strengthening knowledge management and mainstreaming SSM/SLM in policy in support of LDN.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
4,383,500.00	6,245,611.00

Outcome:

5.1. Enhanced scientific, technical and knowledge-transfer capacity at the national and regional scales for SSM and SLM-based innovations in agriculture

Indicators:

- *50% increase of recorded visits to SOILCARE Knowledge Hub*
- *Six (6) research partnerships/agreements by Regional Research, Advisory and Capacity Building Facility on New Adaptation Technologies (RAC/NAT)*
- *CI11: 6,000 of beneficiaries reached through training and other capacity development program (2,400 of women)*

5.2. The LDN approach is mainstreamed in relevant regional policy frameworks as a cross-cutting intersectoral principle.

Indicators:

- *Four (4) sub-regional policy decisions from Council for Trade and Economic Development (COTED) that address matters pertaining to SSM/SLM/ and/or LDN*

Three (3) sub-regional cooperation priorities identified on land and water management for drought and flood risk reduction

Output:

5.1.1. Program implemented to consolidate and expand RAC/NAT role and scope in national and international research and science-policy spheres and to foster sustainability of project results.

5.1.2. Capacity development program for LDN-focused and SSM/SLM based innovations in agriculture implemented.

5.1.3. Communication, knowledge and information management improved through networks established in Phase I and in collaboration with the SIDS - SIDS Green-Blue Economy Knowledge Transfer Hub

5.1.4 PISLM Land Ambassadors programme implemented

5.2.1. Caribbean Soil Support Group for SSM/SLM expanded to include Phase 2 countries and collaboration enhanced with the Latin American and Caribbean Soil Partnership (ASLAC) and UNCCD focal points and acting as science-policy interface in regional fora.

5.2.2. Standardized procedure for LDN TSP 2

5.2.3. Sub-regional structures on integrated planning for drought and flood risk mitigation created and strategies promoted.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
586,585.00	835,766.00

Outcome:

M&E 1. Project is technically sound and timely implemented and managed based in results

Indicators:

100 % of activities implemented according to workplan

Output:

M&E 1.1. Data for project indicators collected (at least) on an annual basis.

M&E 1.2. Annual workplans prepared

M&E 1.3 Gender-sensitive and responsive Annual Project Implementation Reports (PIR), Project Mid-Term and Final Evaluations submitted to GEFSEC in a timely manner.

M&E 1.4. Gender Action Plan (GAP) implemented.

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Updating soil information and data as basis for a strengthened decision making on LDN and resilience to climate change impacts.	3,999,250.00	5,698,132.00
Component 2: Rehabilitation of degraded lands prioritized through national land degradation neutrality target setting process (LDN-TSP) to achieve land degradation neutrality (LDN).	3,263,488.00	4,649,818.00

Component 3: Strengthening CSIDS capability to combat flooding and drought through soil, land, and water management for LDN	1,973,274.00	2,811,521.00
Component 4: Enhancing Food Systems and Alternative Livelihoods supported by transformative financial systems that involves the private sector.	2,940,502.00	4,189,628.00
Component 5: Enhancing scientific and technical capacities, strengthening knowledge management and mainstreaming SSM/SLM in policy in support of LDN.	4,383,500.00	6,245,611.00
M&E	586,585.00	835,766.00
Subtotal	**17,146,599.00**	**24,430,476.00**
Project Management Cost	821,500.00	1,221,524.00
Total Project Cost ($)	**17,968,099.00**	**25,652,000.00**

Please provide Justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Context and land degradation drivers

1. Small Island Developing States (SIDS) are a special case both for environment and development (Agenda 21, 17G). They are ecologically fragile and vulnerable due to its small territorial basis. One of the most critical environmental issues faced by these countries is land and soil degradation. This negative trend in land condition is not occurring homogenously across the globe; there are significant and alarming regional disparities. Latin America and the Caribbean, which includes CSIDS, experience the most severe forms of degradation[1] and report the highest proportion of degraded lands for UNCCD regions (27.7% or more than 17.5 million km^2).[2] The problem of land degradation affects an estimated 34.6 million people across the Caribbean community, with a disproportionate burden on the most vulnerable groups, including women and indigenous peoples.

2. Although the scope and extent of land degradation in CSIDS vary from country to country and within each country, there are similarities in the main drivers. One of them is deforestation and overexploitation of forest resources to support economic and livelihood activities such as agriculture, tourism, mining and quarrying, and illegal logging. Land use change from forest to monocrop lands and artificial surfaces decreases biodiversity and water regulation capacity, resulting in high rates of soil erosion, especially after heavy rains, and imposing serious pressure on remaining critical coastal and inland forests.

3. Expansion of agriculture and inappropriate agricultural practices are defining features of the Caribbean landscape, resulting in significant degradation of soil and land resources. Farming on lands classified as marginal is estimated to

occur on about one third of the one (1) million acres of agricultural land, of which more than 33% is on acidic soils particularly sensitive to land degradation. Almost 10% of agriculture is practiced on steep slopes prone to erosion and landslides with little or no adoption of SSM and SLM practices. This occurs mainly in central Belize, Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines. Overgrazing in the smaller islands of Carriacou and Nevis is also of concern. Indirectly, abandonment of former agricultural lands due to an aging farmer population, aggravated by the removal of preferential access to protected European markets over the past 25 years intensifies the threat of urban expansion. Other pressures include inadequate soil and water management, pest infestations, improper use of fertilizers and other agrochemicals, poor waste disposal, bush fires, and the spread of invasive species.

4. Extreme events including those associated with global climate change - particularly, hydro-meteorological disasters (such as hurricanes, tropical storms, flooding, and drought) are also a major driver of land and soil degradation, fuelled by ongoing and projected climatic change. Downscale climate data for the Caribbean show that the average temperatures have increased historically by 0.2 – 0.7^0C, varying at the country level. The frequency of hot days with temperatures greater than 35^0C have also increased in almost all countries.

5. On the other hand, historic trends in precipitation show a general decline within CSIDS, with some variances. In St. Vincent and the Grenadines, precipitation has decreased by 8.2 mm (-5.7%) per decade since 1960, while Guyana recorded a monthly increase by 4.8 mm each decade since 1960. the on-going reduction of precipitation and increase in air surface temperatures which are already experienced in the region is linked to re-occurring periods of prolonged drought and dry spells. This has caused significant distress to populations and economies in the participating countries. The Caribbean accounts for seven (7) of the world's top 36 water-stressed countries inclusive of Barbados, Antigua and Barbuda, and St. Kitts and Nevis, with less than 1,000 m^3 freshwater resources per capita.[3]3 With droughts becoming more frequent and intense in the Caribbean, agriculture continues to be one of the sectors seriously impacted, due to a heavy reliance on rainfed production systems.

6. The on-going reduction of precipitation and increase in air surface temperatures which are already experienced in the region is linked to re-occurring periods of prolonged drought and dry spells. This has caused significant distress to populations and economies in the participating countries. Building capacities for drought risk reduction among the farming community is imperative, not least because average annual temperature is projected to rise to 0.9-1.3°C by 2050[4]4 regionally, while precipitation is projected to decrease by mid-century, with slightly shorter rainy seasons. Projections at the regional level will be reflected at the national scale e.g. in St. Lucia (with a rainfall reduction of 15-20%) and parts of Guyana (up to 29%). In Dominica, precipitation is expected to decrease in all months except May, June, and July.[5]5 Building capacities for drought risk reduction among the farming community is thus an imperative.

7. With elevated temperatures, the intensity of Atlantic hurricanes has been increasing since 1980 with an expected rise in the frequency of category 4 and 5 hurricanes by 25%–30%. Apart from Guyana, Suriname, and Trinidad and Tobago, all other participating countries in the project have a high probability of being affected annually by hurricanes and tropical storms. Within the last 20 years, the region was exposed to five major storms which resulted in catastrophic impacts on forests, soils, and agricultural systems, disrupting land-based livelihoods and natural ecological cycles. Economic costs were also high – The Category 3 Hurricane Ivan in Grenada in 2004 resulted in damages and losses of EC$ 2.4 billion or 200% of GDP.[6]6 Hurricane Maria, a Category 4 event in Dominica caused an estimated EC$1.3 billion in damages and losses, equivalent to 90% of island's GDP. The most recent Category 3 to 4 Hurricane Beryl decimated Carriacou and Petite Martinique in Grenada leaving a wake of destruction estimated at US$ 218.0 million, equivalent to 16.5 percent of the 2023 GDP.[7]7

8. Sea level rise is also a major risk factor for coastal croplands and forests. The mean rate of sea level rise in the Caribbean was about 1.8 (+/- 0.5) mm per year from 1962- 2012. According to the United Nations Development Programme and based on the first comprehensive assessment of the consequences of projected sea level rise and storm

surge leading to coastal inundation in the region (+1m to +6m), nations, it is concluded that the Caribbean will be affected more seriously by sea level rise than most areas of the world. In fact, the 1m projected sea level rise by 2050 in the northern Caribbean may exceed the global average by up to 25%.

9. An array of underlying socio-economic indirect drivers adds to land degradation trends in the region. Population growth is one such indirect drivers. The subregion's population has grown by 0.37%, in 2023, with a slow population growth being projected from 2019-2029, Belize (+21%), Haiti (+7.26%), and Suriname (+7.88%) showing larger increases. This is likely to increase pressure on finite land resources for competing needs, heightening the risk of land degradation and related socioeconomic disparities. Overall, declines are expected from 2038[8][8].

10. The high debt to GDP ratio in the region is also of concern. Recent research indicates that half of the Caribbean countries' public debt-to-GDP levels are above the maximum "safe" debt limits. While higher debt can enhance economic growth, excessive public debt can have an opposite effect, and may result in higher perceived default risk, less access to financial markets, and a greater focus on meeting current expenditures,[9][9] limiting allocation of funds for SSM and SLM. Relatedly, despite improvements in living standards and human and development indicators, poverty levels have increased and still averages about 30% in the Caribbean. Poverty tends to be concentrated in rural areas, with the poor working in labour-intensive occupations in the agriculture and natural resource sectors and indigenous peoples and women more likely to experience poverty than any other group.[10][10] Such financial insecurity reduces the capacity, interest, and willingness of land users to adopt SSM and SLM practices and technologies – driving the scale of degradation under the most desperate situations. These sociocultural and economic issues are compounded by political instability and increasing violence and insecurity as seen in Haiti, Trinidad, and Jamaica.

11. National macroeconomic policies and weak enabling environment such as poor regulatory and enforcement capacities have also indirectly and unintentionally contributed to land degradation. From a policy perspective, while land degradation and extreme climatic events expose the fragility of the CSIDS food security system, as highlighted during the COVID-19 pandemic, the national emphasis on increased agricultural production for food security across the region is an important policy driver that can potentially intensify the incidence of land degradation, if mitigation measures are not adopted.[11][11]

CSIDS SOILCARE Country-Specific Socio-Economic Context

12. Regional land degradation trends and divers are reflected as specific processes at the national scale and are at different stages in the pathway towards LDN. Antigua and Barbuda, Barbados, Belize, Grenada, Guyana, Haiti, Jamaica and St. Lucia are parties of the CSIDS-SOILCARE Phase 1, which has supported them to advance towards improved soil data, higher policy coherence at the regional level and higher capacity to implement sustainable soil and land management at all stakeholder levels:

13. **Antigua and Barbuda,** a SIDS in the Caribbean, faces significant socio-economic and environmental challenges despite its high-income status and a nominal GDP per capita of USD 14,450. The country's economy is heavily reliant on tourism, which accounted for 48% of GDP and 48.8% of employment in 2019, making it the second most tourism-dependent economy in the region. However, the COVID-19 pandemic caused a 16.7% contraction in GDP in 2020, with unemployment exceeding 30%, and poverty rates rising to 18.4%, disproportionately affecting children (24.3%) and women. Agriculture contributes less than 3% of GDP and employs only 2.2% of the labour force, yet it remains vital for food security. The country is highly vulnerable to climate change, with projections indicating a 30–50% decline in rainfall by 2090, exacerbating water scarcity, already below 1,000 m³ of freshwater per capita, and increasing the risk of land degradation. The impacts of Hurricane Irma in 2017, which devastated Barbuda's agricultural infrastructure, underscore the urgency of building resilience. To combat land degradation, national efforts are underway to develop digital soil maps, update sustainable land management (SLM) and climate-smart agriculture policies, and implement

ecosystem-based approaches to enhance soil retention and biodiversity. These initiatives aim to meet Land Degradation Neutrality (SDG 15.3.1) targets and ensure sustainable livelihoods for vulnerable rural populations.[12][12]

14. **Barbados**, a SIDS with a landmass of just 432 km², faces acute socio-economic and environmental vulnerabilities, particularly in relation to land degradation. Approximately 15% of the island's terrestrial space, primarily the Scotland District, is prone to soil erosion and slippage, posing significant risks to agricultural productivity and rural livelihoods. Agriculture contributes only 1.8% to GDP and employs just 3.6% of the labour force, reflecting a sector constrained by low investment, aging farmers, and limited modernization. Despite these challenges, the sector demonstrated resilience during the COVID-19 pandemic, growing by 1.8% while other sectors contracted sharply. Barbados imports around 80% of its food, and the government has committed to reducing this dependency by 25% by 2025 through import substitution. However, land degradation, compounded by water scarcity, Barbados ranks among the world's 10 most water-scarce countries with only 306 m³ of freshwater per capita annually, and climate change impacts such as saltwater intrusion and reduced rainfall, threatens these goals. The CPF prioritizes sustainable land management and climate-resilient agriculture, including the development of digital soil and land management systems and the implementation of land degradation neutrality (LDN) targets, to enhance food security, rural development, and environmental sustainability.[13][13]

15. **Belize,** a lower middle-income country with a rural poverty rate of 59%, faces acute socio-economic and environmental challenges, particularly in the agriculture sector, which is highly vulnerable to land degradation. Agriculture contributes significantly to employment and GDP, yet its productivity is increasingly undermined by unsustainable land use, deforestation, and the impacts of climate change. Between 2000 and 2016, extreme weather events, including hurricanes and tropical storms, caused agricultural losses exceeding US$232 million. In a single month (February 2018), excess rainfall and flooding led to damages of US$1.9 million. These events accelerate soil erosion, reduce arable land quality, and threaten the livelihoods of smallholder farmers, many of whom lack access to insurance or adaptive technologies. Climate projections indicate a reduction in rainfall of up to 10% in the south and a temperature increase of 1.3°C by the 2030s, further intensifying land degradation risks. These environmental stressors, coupled with limited institutional capacity and high rural poverty, make sustainable land management and climate-resilient agriculture essential for safeguarding food security and promoting inclusive rural development in Belize.[14][14]

16. **Grenada** faces significant environmental challenges, particularly land degradation and soil erosion, which threaten its limited arable land and the sustainability of its agriculture sector. With agriculture contributing approximately 4.8% to GDP as of 2021, and over 80% of farmers operating on plots smaller than 0.2 hectares, the sector is highly vulnerable to climate-induced pressures. The country's volcanic, mountainous terrain, combined with intense rainfall, deforestation, and unsustainable land use, accelerates soil erosion and reduces land productivity. Climate change has intensified these issues, leading to crop and livestock losses, wildfires, and soil salinization due to sea-level rise. To address these threats, Grenada is investing in digital soil and land management information systems, with targets including the installation of at least one national digital soil map, the rehabilitation of degraded lands through sustainable land management (SLM) and climate-smart agriculture (CSA), and the development of updated national policies on sustainable soil and land use. These efforts are aligned with the country's commitment to achieving Land Degradation Neutrality (SDG 15.3.1) and enhancing resilience in the face of environmental shocks.[15][15]

17. **Guyana's** rapid economic growth, fuelled by offshore oil discoveries, contrasts with persistent environmental challenges, particularly land degradation. The country's coastal plain, home to most of its population and the heart of its agricultural production, is increasingly threatened by flooding, saline intrusion, and soil erosion, exacerbated by climate change and unsustainable land use. In the interior regions, especially Regions 7 (Cuyuni-Mazaruni), 8 (Potaro-Siparuni), and 9 (Upper Takutu-Upper Essequibo), areas predominantly inhabited by Indigenous communities, land degradation is linked to deforestation, shifting cultivation, and unregulated mining, contributing to high rates of stunting (up to 31% in region 8) and food insecurity. Agriculture remains a cornerstone of the economy, contributing 16.9% to GDP and employing 17% of the labour force, yet its sustainability is at risk. In response, national efforts aim to train 90% of staff at the Guyana Lands and Surveys Commission (GLSC) and key sector personnel in sustainable land administration and

restoration by 2026, up from a baseline of 25%. Additionally, a harmonized land policy and regulatory framework is being developed to support Sustainable Land Development and Management (SLDM) and align with international standards, reinforcing Guyana's commitment to Land Degradation Neutrality (SDG 15.3.1) and long-term environmental resilience.[16][16]

18. **Haiti** has 27,750 square kilometres of land area including four large offshore islands: La Gonave (680 Km²); La Tortue (180 Km²); Ile à Vache (52 Km²) and Ile Cayemite (45 Km²) and an estimated population of some 11,375,024 inhabitants in mid-2020. A significant number of lands in Haiti (approximately 63%) have slopes greater than 20%, whereas only 29% have slopes of less than 10%. Approximately, 97% of Haiti's forests have been cleared for wood or charcoal, resulting in accelerated runoff and associated erosion of fertile topsoil and biodiversity loss. Approximately, 4200 ha of soil is estimated to be eroded per year and at least 6% of the land is irreversibly eroded. Less than 20% of the land under cultivation is appropriate for agriculture while most of the cultivated areas are very small parcels. A main driver of degradation in Haiti is the population pressure on limited resources with an average of 415 people per square kilometre, which ranks 17th in the world.

19. **Jamaica** socio-economic development is closely tied to its land resources, particularly through agriculture, which contributes 7.1% to national GDP, nearly double the Caribbean average, and employs over 17% of the labour force. However, land degradation poses a growing threat to this sector and to rural livelihoods. Key issues include declining soil fertility, watershed pollution from agrochemical overuse, and the loss of agricultural land due to encroachment and development. Only 10% of Jamaican farmers have access to credit, largely due to challenges in land registration, which limits investment in sustainable land management. Additionally, 30–40% of food is lost post-harvest, further straining the productivity of degraded lands. Rural areas, home to 44% of the population, experience the highest poverty rates (15% in 2018), making them particularly vulnerable to the socio-economic impacts of land degradation. The CPF identifies sustainable land and natural resource management as a strategic priority to enhance resilience, reduce poverty, and support inclusive rural development in line with Vision 2030 Jamaica and the Sustainable Development Goals.[17][17]

20. **Saint Lucia's** socio-economic development is shaped by its vulnerability to climate change, declining agricultural productivity, and environmental degradation. Although agriculture contributes a modest share to GDP, it remains vital for rural livelihoods and food security. The sector, historically dominated by banana production, has declined due to changes in EU trade preferences and increasing climate-related shocks. The country's steep terrain and high rainfall make it particularly prone to soil erosion and land degradation, especially in areas affected by deforestation and unsustainable land use. These environmental pressures threaten the productivity of smallholder farms, many of which operate on marginal lands. Recognizing these risks, Saint Lucia has prioritized the sustainable use of natural resources and climate-smart agriculture through its Sectoral Adaptation Strategy and Action Plan for Agriculture (2018–2028). The government, with FAO support, launched the 2024 Census of Agriculture and Fisheries to gather updated data on land use, soil conditions, and farming practices, critical for evidence-based policymaking. This initiative aims to inform strategies that address land degradation, enhance resilience, and support the country's commitment to Land Degradation Neutrality (SDG 15.3.1). Additionally, the census will help establish a master sampling frame for regular surveys, ensuring sustained monitoring of soil health, land use, and agricultural sustainability.[18][18]

21. The activities and results of the CSIDS-SOILCARE Phase 1 in regional policy spheres have also benefited the rest of the CARICOM countries. Bahamas, Dominica, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago are now joining the SOILCARE program in its Phase 2. Although with differences in their land degradation status, advances in fighting land degradation all the countries new to the program have been slow, and they largely share the same barriers to LDN implementation than Phase 1 countries:

22. **The Bahamas** is a high-income SIDS with a population of approximately 400,000, spread across 30 inhabited islands and over 700 cays. The country's economy is heavily dependent on tourism and financial services, which together account for more than 70% of GDP and employment. However, this economic structure renders The Bahamas highly vulnerable to external shocks, including global economic downturns and climate-related disasters. The country is among the most hurricane-prone in the Atlantic basin, with recent events such as Hurricane Dorian (2019) causing

damages estimated at over US$3.4 billion, equivalent to more than a quarter of national GDP. These events have not only disrupted livelihoods and infrastructure but have also accelerated environmental degradation, particularly in coastal and low-lying areas. Land degradation in the Bahamas is a growing concern, driven by a combination of natural and anthropogenic pressures. The country's limited landmass (less than 14,000 km) is characterized by thin, nutrient-poor soils, high limestone content, and low natural fertility, making it inherently vulnerable to degradation. Unsustainable land use practices, including unregulated tourism development, sand mining, deforestation, and poorly managed agricultural expansion, have led to soil erosion, compaction, salinization, and loss of vegetative cover. In particular, the conversion of coastal wetlands and mangroves for infrastructure and tourism has disrupted natural hydrological cycles, reduced biodiversity, and increased the risk of saltwater intrusion and flooding. The impacts are especially pronounced in the Family Islands, where communities rely heavily on small-scale farming, fishing, and natural resources for their livelihoods. These areas face increasing pressure from drought, invasive species, and land abandonment, further exacerbating degradation and reducing land productivity. Despite its high-income status, the Bahamas faces persistent socio-economic disparities, particularly between the capital, Nassau, and the outer islands. Rural communities often lack access to basic services, infrastructure, and economic opportunities, making them more vulnerable to the impacts of land degradation and climate change. The agricultural sector, though contributing less than 2% to GDP, plays a critical role in food security and poverty reduction. However, declining soil health, limited access to water, and the absence of sustainable land management practices have constrained its development. Addressing land degradation in The Bahamas is therefore not only an environmental imperative but also a socio-economic necessity, requiring integrated approaches that enhance ecosystem resilience, support sustainable livelihoods, and reduce vulnerability to climate-related shocks.[19][19]

23. **Dominica**, a volcanic SIDS with a population of approximately 71,800, is characterized by rugged terrain, rich biodiversity, and high ecological sensitivity. The country's economy, classified as upper-middle income with a GDP of approximately USD 470 million (2021), is heavily reliant on tourism and agriculture, sectors that are highly vulnerable to climate shocks. Over 90% of the population resides in coastal zones, increasing exposure to extreme weather events. The devastation caused by Hurricane Maria in 2017, resulting in damages equivalent to 226% of GDP, highlighted the country's acute vulnerability to climate change and natural disasters. Agriculture, contributing 10–13% of GDP over the past two decades, remains a critical source of food security and rural livelihoods, employing about 20% of the workforce. However, the sector faces declining productivity due to small farm sizes, aging farmer demographics, limited arable land, and inadequate infrastructure. Land degradation, driven by deforestation, landslides, unsustainable farming on steep slopes, and hurricane-induced soil erosion, has intensified in recent years. Between 1997 and 2017, agricultural land use increased from 22.7% to 33.3%, while forest cover declined, largely due to storm damage. Sustainable land management, climate-resilient agriculture, and ecosystem restoration remain strategic priorities, aligning with Dominica's vision to become the world's first climate-resilient nation. Addressing land degradation is therefore central to achieving environmental sustainability, economic resilience, and inclusive rural development.[20][20]

24. **Saint Kitts and Nevis** is a high-income SIDS with a population of approximately 53,000 and a per capita income of USD 17,435. The economy is heavily reliant on tourism, which accounted for over 60% of GDP prior to the COVID-19 pandemic. However, the country remains highly vulnerable to external shocks, including climate change, natural disasters, and global economic fluctuations. The closure of the sugar industry in 2005 led to significant shifts in land use, with large tracts of land left idle or underutilized, contributing to erosion, invasive species spread, and biodiversity loss. Agriculture now contributes only 1.3% to GDP, yet remains vital for rural livelihoods and food security, particularly in the face of a food import bill exceeding USD 76 million and over 80% of food being imported. Land degradation in Saint Kitts and Nevis is driven by a combination of natural and anthropogenic factors, including hillside farming, deforestation, drought, and poor land management practices. Over 90% of crops are rain-fed, making the sector highly susceptible to increasingly frequent droughts and erratic rainfall patterns. Soil erosion, salinization, and declining fertility are exacerbated by the absence of integrated land use planning and limited adoption of sustainable land management (SLM) practices. The country's freshwater availability is critically low (461 m^3 per capita), and water scarcity further constrains agricultural productivity and resilience. Addressing land degradation is central to enhancing food sovereignty, reducing rural poverty, and building climate resilience in Saint Kitts and Nevis. Strategic

interventions focus on promoting climate-smart agriculture, integrated water resource management, and leveraging digital tools and renewable energy for efficient land and water use.[21][21]

25. **Saint Vincent and the Grenadines** is a multi-island SIDS in the Eastern Caribbean, with a population of approximately 110,947 and a GDP of USD 809 million (2020). The country's economy is driven by tourism, agriculture, and remittances, but remains highly vulnerable to external shocks, including climate change, natural disasters, and global economic fluctuations. The 2021 eruption of La Soufrière volcano, which displaced 18% of the population, caused widespread damage to infrastructure, agriculture, and forestry, compounding the socio-economic impacts of the COVID-19 pandemic. Agriculture and fisheries remain vital to rural livelihoods, employing over 9,000 farmers and 2,500 fisherfolk, and contributing to more than 67% of exports. However, the sector faces persistent challenges, including limited arable land, aging farming populations, low mechanization, and vulnerability to droughts, pests, and extreme weather events. Land degradation is a critical and growing concern in Saint Vincent and the Grenadines, driven by unsustainable land use practices, hillside farming, deforestation, and the increasing frequency of climate-induced hazards such as droughts, floods, and volcanic activity. The country's mountainous terrain and volcanic soils are highly susceptible to erosion and landslides, particularly in areas where vegetation has been cleared for agriculture or settlement. The 2021 volcanic eruption significantly accelerated land degradation, with ashfall and lahars damaging fertile lands and forest ecosystems. The Draft Land Use Policy (2018) and the National Agriculture, Fisheries and Forestry Sector Development Plan (2017–2025) both highlight the urgent need for sustainable land management (SLM), improved land tenure systems, and the preservation of quality agricultural land through zoning and land banking mechanisms Addressing land degradation is central to achieving food security, reducing rural poverty, and building resilience to climate change in Saint Vincent and the Grenadines, particularly for vulnerable populations in high-risk zones.[22][22]

26. **Suriname** is an upper-middle-income country in South America with a population of approximately 602,500 and a land area of 163,820 km², 93% of which is covered by tropical rainforest. The economy is heavily reliant on extractive industries (gold, oil, and bauxite) which account for nearly half of public revenue and over 80% of exports. However, this dependence, coupled with expansionary fiscal policies and global market volatility, has contributed to recurring economic instability, including a severe fiscal crisis in 2020–2022. Agriculture, forestry, and fisheries contribute around 10% to GDP, with rice, bananas, and fish comprising 90% of agricultural exports. Despite the country's vast agricultural potential, 120,000 ha of 1.5 million ha of suitable land is currently under cultivation, productivity remains low due to outdated practices, limited mechanization, and inadequate infrastructure. Land degradation in Suriname is a growing concern, particularly in the coastal and interior regions. Soil degradation, driven by unsustainable agricultural practices, deforestation, and poor land use planning, has led to erosion, nutrient depletion, and reduced water retention capacity. These impacts are compounded by climate change, with increasing incidences of extreme rainfall, droughts, and flooding—especially in low-lying coastal districts such as Nickerie, Saramacca, and Wanica, where most agricultural activity is concentrated. The 2021 floods submerged entire villages and agricultural plots in the interior, highlighting the vulnerability of both ecosystems and rural livelihoods. Forest degradation, primarily caused by logging, mining, and agricultural expansion, threatens biodiversity, disrupts ecosystem services, and undermines the resilience of forest-dependent communities, including Indigenous and Tribal Peoples (ITPs), who comprise around 5% of the population.[23][23]

27. **Trinidad and Tobago**, a high-income SIDS with a population of approximately 1.4 million, has a diversified economy historically rooted in oil and gas, but increasingly challenged by the need for economic diversification, food security, and environmental sustainability. While the energy sector remains dominant, contributing significantly to GDP and exports, it has also constrained the growth of the non-energy economy, including agriculture, which currently contributes only 1% to GDP and 2.9% to employment. Despite this, the country imports over 80% of its food at an annual cost of USD 750 million, making food security a national priority. The COVID-19 pandemic, coupled with global supply chain disruptions and inflationary pressures, has further exposed the vulnerabilities of TTO's food systems and rural livelihoods. Land degradation in Trinidad and Tobago is a growing concern, particularly in the context of climate change, unsustainable land use, and limited land availability. The country's small land area (5,131 km²) is under increasing pressure from urbanization, quarrying, deforestation, and poorly managed agricultural practices, especially in hilly and erosion-prone areas. Soil erosion, declining fertility, and loss of vegetative cover

are exacerbated by extreme weather events, including floods and droughts, which are becoming more frequent due to climate change. The Government of the Republic of Trinidad and Tobago, through the Ministry of Agriculture, Land and Fisheries, is advancing a comprehensive agenda to modernize agriculture, enhance land governance, and promote sustainable natural resource management. This includes the development of a national land use policy, digitization of extension services, and the piloting of climate-resilient production units.[24][24]

Current strategy against land degradation

28. All the above has underscored the need for better use of soil and land resources in CSIDS, evident by Decision 8 of the XXII Meeting of the Forum of Ministers for Latin America and the Caribbean which called for "…the development of a CSIDS COVID-19 Recovery Response to address issues relevant to the economic health of CSIDS, including, inter alia, protocols to support sustainable tourism recovery; and enhancing food security through the sustainable use of land and marine resources."

29. The issue of food security was addressed by the Thirty-Second Intersessional Meeting of the Conference of Heads of Government of CARICOM held virtually on 24-25 February 2021, which acknowledged that the situation of food security in CARICOM remained a major challenge, exacerbated by climatic and non-climatic events, disruptions in production and global supply chains, and barriers to intra-regional trade. To address the mounting regional food import bill, greater investment in agriculture and food production through strategic partnerships with the private sector bodies was recommended. Concerns about the region's food security subsequently led to the agreement of the Head of Government of CARICOM to launch the 25% by 2025 Initiative, a strategy aimed at reducing the Region's large food import bill.[25][25]

30. In recognition of the need to take important and strategic action to combat land degradation and address the risks and impacts of drought and flood, governments across the Caribbean region have all signed and ratified the UNCCD. Consistent with the commitment to implement the obligations of the Convention, many states aligned their National Action Programmes (NAPs) to the UNCCD 10-year strategic plan (2008-2018) and subsequently adopted the LDN framework as a national vision requiring strategic action. Commitment to this vision is demonstrated by the development and implementation of the national Land Degradation Neutrality Target Setting Processes (LDN TSP) among participating states. The LDN TSPs were developed through participatory processes that identified targets and measures to address land degradation, with the goal of attaining SDG 15.3.

31. Overall, the LDN TSPs prioritized seven (7) main strategic actions: (i) restoration of degraded lands, (ii) reduced conversion of forest through enhanced policy, enforcement and governance frameworks, (iii) increased SOC and land productivity, (iv) strengthened data collection and reporting, (v) partnerships with the private sector, communities and civil society organizations, (vi) financial resource mobilization, and (vii) SSM/SLM and LDN education to address the drivers of land degradation. Political support and leadership to underpin the effective pursuit and implementation of the LDN TSPs are provided through competent public sector agencies such as the Ministries of Agriculture, Environment, and Sustainable Development at the national level.

32. Countries have also made efforts to develop supportive policies and strategic planning instruments to provide a coherent framework for SSM and SLM. This includes *inter alia* National Land, Forestry and Agricultural Policies, with subsidiary laws and regulatory frameworks. National development instruments such as the Barbados Medium Term Growth and Development Strategy 2013-2020 and Guyana Low Carbon Development Strategy 2030 are all cases in point. These are all expected to positively impact member states pursuit of the LDN vision and attainment of the SDGs. Regional organizations have also leveraged the synergistic work of allied partners working in the field of food and nutrition security, poverty reduction, climate change, and biodiversity conservation to support progress in reducing land degradation.

33. The CSIDS-SOILCARE Phase 1 Project has made notable contributions in strengthening the enabling environment for sustainable soil and land management across CSIDS. National soil surveys have provided updated and more accurate data on soil properties in Barbados, Grenada, Guyana, St. Lucia, Antigua and Barbuda, Belize, and Jamaica. National laboratories in Barbados, Grenada, Guyana, St. Lucia, Belize, Haiti and Jamaica have received equipment,

increasing their capacity for soil data production, and the Caribbean Soil Laboratory Network (CARSOLAN) was established to harmonize soil laboratory methods across the Caribbean, improving the quality and consistency of soil data production.

34. From newly produced national data, Soil Organic Carbon (SOC) maps have been produced for Antigua & Barbuda, Barbados, St. Lucia, Grenada and Guyana, and SOC sequestration potential maps are already available for Antigua and Barbuda, Barbados, Grenada and Jamaica. The Caribbean Soil Information System (CARSIS) is currently under development, with digital soil maps for Antigua and Barbuda, Barbados, Saint Lucia, Jamaica, and Grenada integrated. Despite the progress made on improving capacity on soil data and soil carbon data assimilation and analysis, the activities under the project have been delayed. Soil sampling, analysis and mapping in Belize, Guyana and Jamaica will not be completed in these countries until mid-2026. In Haiti, the problems of political instability and insecurity mean the outcome is no longer realistic and needs to refocus on completing soil data and maps for the Northern region only, where conditions are stable.

35. All beneficiary Phase 1 countries have participated in training on Standard Operating Procedures (SOPs), Digital Soil Mapping (DSM) and Climate Smart Agriculture (CSA) implementation, although progress on activities to build capacity to address gaps in key areas of resilience planning tools and methods and the application of CSA, has been slow. Site assessments and restoration plans have been produced in Antigua and Barbuda, Barbados, Belize, Grenada, Guyana, Haiti, and Saint Lucia, but as of October 2025, actual field implementation has only started in Barbados and Grenada. Climate Smart Agriculture (CSA) guidelines along with risk assessments have been finalized. One model farm has been established in Barbados. Guyana has finalized its concept note for the Little Biabu site, while St. Lucia, Belize, and Jamaica have conducted CSA training sessions but have not started implementation. The Regional Agricultural Centre for New Adaptation Technologies (RAC/NAT) facility has successfully completed trials in hot pepper production, showcasing the potential of integrated soil fertility management. Belize has completed feasibility studies and identified a biofertilizer factory for development. A Knowledge Hub has been established to make available best practices and validated adaptation tools, and to become a repository for training materials, webinars, conference proceedings and technical workshops. The CARSIS is embedded in the Hub and informs online decision support tools for Phase 1 countries.

36. Substantial investment and progress have been made on the integration of SLM issues, practices and processes in the Caribbean Community Policy and decision-making frameworks. SOILCARE Phase 1 was able to convene three (3) meetings of the Caribbean Ministers responsible for UNCCD and had the resolutions of each meeting endorsed and or adopted by both COTED [Environment] and COTED [Agriculture] (as applicable). These Ministerial outcomes were also adopted at OECS Ministers of Environment. The Caribbean Soil Support Group (CSSG) and the Sustainable Soil/Land Management Framework Agreement Group (SSLMFAG) were established and are functioning. As per the Ministerial Council mandate, this group is now an organ of the PISLM and serves as the advisory group to the Executive Committee of PISLM. Because the SSLMFAG comprises several Caribbean Institutions it provides appropriate input, based on their expertise, into the several policies and projects being carried out by PISLM. Currently, both the CSSG and the SSLMFAG are providing input into the development of CSIDS-SOILCARE Phase 2. The Ministerial Council also approved the report of a study commissioned by PISLM for the establishment of a regional SLM/SSM funding mechanism and instructed the PISLM Secretariat to operationalize the fund.

Remaining barriers

37. Despite some success is being attained through these measures, progress has been slow and incremental. Full implementation of the LDN TSPs and other policy and strategic planning frameworks in support of SSM, SLM and drought and flood risk reduction depend on sustained financial investment and programming to buttress local capacities. Specifically, five (5) main barriers remain that limit achievement of LDN and the adoption of SSM and SLM measures in the 14 participating states.

38. The first barrier pertains to the still ***limited soil information and data fragmentation***. In most CSIDS-SOILCARE Phase 2 countries this is a major constraint which hinders LDN target setting and decision-making. Knowledge of soil characteristics and properties are key inputs for assessing watershed behavior, land use suitability, erosion and landslide risk analysis. However, soil information is still seriously lacking. In countries new to the program, comprehensive soil surveys were last conducted between the 1950's to 1970's, with only a few countries having digitized or updated this information using georeferenced samples. Analytical data supporting geospatial distribution of soils is also outdated rendering it practically unusable. Although some research has been conducted on Caribbean soils, it has been project

driven, resulting in fragmentation and low accessibility. This is a significant limitation to national development and investment decisions, and the capacity to report on international commitments.

39. The second barrier is the ***limited adoption of SSM/SLM and low capability for implementation and integrated land planning for LDN***. Recognizing that LDN is not the simple implementation of SSM and SLM practices but rather provides a framework for a balanced approach which considers trade-offs and anticipates new degradation, planning is needed to bridge the gap between policies and healthy land, in order to achieve no net loss of land-based natural capital. While, in the Caribbean, there is some familiarity with SLM among specialists working with farmers and stakeholders, technical capacity is limited. Protocols, technical resources and methodologies to avoid, reduce and reverse land degradation, including the incorporation of nature-based solutions, are mostly unavailable and/or seldom applied. Demonstration of SSM/SLM approaches, including indigenous technologies, within the context of integrated land use planning to foster adoption of sustainable practices are needed.

40. A third barrier is the ***weak capability to address vulnerability to the climatic hazards of flooding and drought and related land degradation***. with drought and flood risk management being insufficient, particularly regarding monitoring, forecasting and mitigation capacities. National Drought Plans are non-existent or are outdated, and there is not a regional and coordinated response to drought and other climate risks that enables systematic cooperation and decreases vulnerability.

41. ***No proof of concepts for investment and financial instruments that encourage the adoption of SSM/SLM***, including proactive planning to address changes in the international trading regime and its implications in the productive landscape represents the fourth barrier. This area remains extremely weak in the participating countries. The adoption of SSM and SLM practices can be risky and financially onerous in the short-term, particularly for smallholder farmers. Therefore, strategies that reduce risk and encourage investment and adoption of SSM and SLM measures are needed to upscale the LDN approach at national and regional scales. The situation is even more difficult for the youth, as they generally own few assets and have do not have a credit history and therefore cannot secure financing,

42. The ***limited enabling environment for the generalized adoption of SSM and SLM and implementation of the LDN approach*** constitutes the fifth barrier. This is within the context of the (i) weak and fragmented institutional and legal frameworks for LDN at the national level, (ii) lack of sufficient integration of SLM issues, practices and processes in CARICOM's policy and decision making frameworks, (iii) insufficient trained human resources in key areas, such as soil science and innovation for climate smart and sustainable agriculture, (iv) low integration of SSM/SLM in national and regional public education, including linkages to ecological and socio-economic processes, in particular, to food security, and (v) limited availability of sustainable forms of financing.

43. **In the absence of this project's investment**, these barriers will remain unconfronted. Unsustainable practices and weak governance will remain, perpetuating land degradation, exacerbating vulnerabilities to climate change, food insecurity, and economic disparities. Communities will remain exposed to frequent droughts, floods, and hurricanes, with escalating socio-economic and ecological costs.

44. In contrast, the **with-project scenario** envisions a transformative pathway where systemic change addresses the region's vulnerabilities. LDN is achieved through SSM/SLM, combining traditional knowledge with innovative technologies tailored to local contexts. Participating states strengthen institutional frameworks and leverage collaborative governance to implement adaptive strategies that address both current and emerging risks. This scenario includes improved resilience to climate shocks, restored ecosystems, and enhanced livelihoods as key outcomes.

CSIDS-SOILCARE Phase 2 alternative

45. To address the foregoing barriers necessitates a comprehensive and integrated investment programme. Eight (8) CSIDS — Antigua and Barbuda, Barbados, Grenada, Haiti, Jamaica and Saint Lucia, together with Guyana and Belize approached implementation of SDG 15.3 through the project - *Caribbean Small Island Developing States (SIDS) Multicounty Soil Management Initiative for Integrated Landscape Restoration and Sustainable Food Systems: Phase 1 (**CSIDS-SOILCARE Phase 1**)*. These countries and six (6) additional states within CARICOM — The Bahamas, Dominica, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago, reconfirmed their commitment to SSM and SLM and agreed to engage in **CSIDS-SOILCARE Phase 2**.

46. CSIDS-SOILCARE Phase 2 will support the CSIDS in **applying and scaling the principles of LDN to effectively decrease land degradation in the Caribbean, increase climate resilience of food systems, and improve livelihoods,**

through sustainable soil and land management. By assisting CSIDS to create an enabling environment for their transformation to achieving LDN, CSIDS-SOILCARE Phase 2 will build on aspects of the infrastructure established by Phase 1 to ensure that all CSIDS are on the same sustainable land and soil use and management trajectory towards LDN by the end of the implementation of Phase 2. Moreover, **Phase 2 has a wider scope** than its forerunner in its aim of addressing climate challenges, particularly mitigating drought and flood risk in agriculture from the LDN approach, thereby contributing to the region's food security which has become a critical matter of concern, especially post COVID-19.

47. Phase 2 of CSIDS-SOILCARE is structured to attain six (6) key outcomes, each addressing the fundamental barriers faced regionally: (i) improved capacity to monitor and report on LDN, including the use of soil data to make informed decisions and contribute to regional and global soil and climate knowledge systems; (ii) implementation of proven interventions to avoid, reduce, and reverse land degradation to achieve LDN by small-scale farmers and other stakeholders, (iii) enhanced integrated land planning strategies based on SLM and SSM to reduce flood and drought risks and for mitigation are available to Governments and Caribbean stakeholders; (iv) governments and stakeholders in Caribbean countries leverage financing of SSM and SLM based production for LDN and climate resilience; (v) the scientific, technical and knowledge-transfer capacity of CSIDS for SSM and SLM-based innovations in agriculture is enhanced in support of LDN at the national and regional scales; and (vi) LDN approach is mainstreamed in relevant regional policy frameworks as a cross-cutting intersectoral principle.

48. The CSIDS-SOILCARE Phase 2 project addresses land degradation across all beneficiary countries through targeted interventions aligned with national LDN priorities. The project intervention areas were selected using the following criteria: (i) priority areas identified through the LDN TSP, (ii) multi-activity protected landscapes where food production is contributing to significant land degradation, (iii) land which been degraded through unsustainable economic activities (e.g. agriculture, small scale mining activities etc.) and are in need of rehabilitation and/or restoration and (iv) existing projects or programs that enable impact optimization. Country wise quantitative targets were decided using a soft reference of 25% of the country voluntary targets for small islands, so both the country total area and the amount of land degraded were taken into consideration in the calculations. For bigger countries, a 25% of country targets would be not achievable by the project, so acreages were decided through in-country *ad hoc* assessments, considering the country's execution capacity, including collaborations with concurrent projects and national programs with similar objectives and approaches.

Most of the selected intervention sites are new to the program. However, some of the Phase 1 locations have been re-selected, to expand on previous activities and results. Such is the case of Sedge Pond, Greenland Over Hill and Coggins Estate, in the Scotland District of Barbados, Dumfries and Bellevue South in Carriacou - Grenada, Kimbia in Guyana and Holland Estate in Jamaica, which were selected after in-country assessment of potential gains.

49. In Barbados, where over 20% of land is degraded, the CSIDS-SOILCARE Phase 1 has directly intervened in 13 Ha, building nurseries for reforestation and rehabilitating rainwater harvesting systems and irrigation infrastructure. Through outscaling plans, the forest restoration activities will reach 219 Ha at the end of Phase 1. Phase 2 will expand the results of Phase 1 to bring improved management to the restored sites including the use of biofertilizers and erosion control methods. Specifically, the use of bioinputs under CSIDS-SOILCARE Phase 2 (output 2.1.2, see detailed project description below) will build on the learnings from Phase 1 activities in Belize, where biofertilizers and biopesticides are being developed, tested and adapted to local conditions in the Sugar Belt area in the north of the country in collaboration with national institutions.

50. In Carriacou - Grenada, CSIDS-SOILCARE Phase 2 will restore 16 ha of land in Bellevue South, in partial execution of Phase 1 scaling plan, and introduce soil recarbonization and integrated soil fertility and pest management in additional 69 ha in Dumfries where grazing management (originally under "let go" system) has been improved under Phase 1. The improved management approaches will be scaled to the full area covered by Phase 1 restoration plans. In addition, severe agricultural degradation will be also targeted at an additional site at Pearls.

51. Activities of CSIDS-SOILCARE Phase 1 in Kimbia consisted in improving agricultural management in 102 Ha of croplands, a degraded area due to continuous monocropping and logging. Agroforestry alternatives were implemented under Phase 1, which will be expanded and complemented with integrated soil fertility management (ISFM) under Phase 2. Soil improvement activities will have place also in croplands at Moco Moco.

52. In Jamaica, the Holland Estate area (101 Ha) has undergone improved management under CSIDS-SOILCARE Phase 1, mainly addressed to improving livelihood alternatives and including rotational grazing, improved irrigation and

installation of a nursery to facilitate agricultural diversification and agroforestry. Under Phase 2 actions to improve soil management in 1122 ha will be implemented (136 ha of SSM, including ISFM that introduces the use of bio-inputs and IPM and greater focus on IWRM strategies, 757 ha of improved pasture management, and 229 ha of agroforestry), and scaled to the whole extension of Holland Estate (2000 ha).

53. Regarding other countries, the Cades Bay Agricultural Station (4.3 ha), in Antigua and Barbuda, will undergo rehabilitation to counter grassland and wetland loss. The Bahamas faces severe deforestation and land conversion; interventions include the Gladstone Road Agricultural Centre (150 ha), Grand Bahama National Forest Estate (200 ha), and Smith's Bay Farm Road (4.9 ha). Dominica, with forest cover reduced from 75% to 66% over two (2) decades, will focus on sites near Morne Trois Pitons.

54. St. Kitts and Nevis has 32% degraded land on St. Kitts and 8.8% on Nevis, with two intervention sites identified in Cayon, Saint Kitts, and Mannings, Nevis. St. Lucia, with 4% degraded land, will focus on the Soufriere Watershed, while activities in St. Vincent and the Grenadines will build on biodiversity and soil restoration projects at Top Hill, Perseverance, Orange Hill and Chatham Bay. Suriname, where 15.9% of land is degraded, aligns its interventions with Amazon conservation initiatives. Trinidad, with the highest degradation rate at 58.3%, will rehabilitate the National Quarries Limited site, Plum Mitan agricultural area, and St. Michael Forest Reserve. Belize and Haiti have no implementation sites under components 2 and 3 of Phase 2 but participate in the rest of the project activities.

55. The CSIDS-SOILCARE Phase 2 project has been designed to ensure that interventions are robust in case of changes in drivers and to promote long-term sustainability of project outcomes. It integrates future narratives through scenario-based planning and incorporates dynamic risk assessment into an adaptive monitoring framework, in which regular updates to risk assessments will ensure the project's relevance and long-term impact. Specifically, being climate one of the key system drivers in the Caribbean and in recognizing the dynamic nature of climate conditions, the project has proactively been designed to be robust to future climate change and to extreme meteorological events. It considers evolving climate scenarios and is expected to enhance adaptative capacities at local, regional and national scales through the LDN approach, through interventions that not only mitigate the immediate impacts of climate-related challenges but also establish a foundation for sustained resilience in the face of future climate uncertainties.

56. Stakeholders will play a central role in shaping and implementing the project through inclusive, gender-responsive, and participatory processes. National ministries of Agriculture, Environment, and Planning, along with UNCCD focal points, provide strategic guidance and policy alignment, while regional and international partners such as CARICOM, OECS, FAO, and research institutions like UWI and CARDI contribute technical expertise and capacity building.

57. Beyond government and community actors, private sector stakeholders—including agribusinesses, financial institutions, and agencies supporting small and micro-enterprises—are critical for scaling SLM practices and mobilizing investment. These actors will support value chain development, provide financing for climate-resilient agriculture, and foster innovation in soil and land management.

58. Farmers, women's organizations, youth groups, and indigenous communities are key beneficiaries and active participants, ensuring that interventions reflect local realities and traditional knowledge. The project emphasizes gender equality by promoting women's leadership, addressing barriers to participation, and ensuring at least 40% representation in consultations and decision-making bodies.

59. Engagement strategies include multi-stakeholder consultations, capacity-building workshops, and targeted outreach to marginalized groups, ensuring that all voices—especially those of women, youth, and indigenous peoples—inform project design, implementation, and monitoring. This collaborative approach strengthens ownership, enhances sustainability, and aligns with regional and global commitments to inclusive development and environmental governance. The project will specifically address the structural inequalities that exacerbate vulnerability, particularly among women in rural communities, as a key aspect of the project's adaptation strategy. By integrating gender-sensitive interventions, such as targeted training and inclusive decision-making mechanisms, the project seeks to maximize both environmental and social resilience. Tenure aspects will be considered too in planning on the ground activities, in line with the Decisions 26/COP14 and 27/COP15 of the UNCCD and the FAO-UNCCD technical guide on the integration

of the Voluntary Guidelines on Responsible Governance of Tenure for Land, Fisheries and Forest into the implementation of the UNCCD and LDN (FAO & UNCCD 2022)[26] for improved land planning.

60. The project's approach to capacity development is a cornerstone for project results sustainability. The strategy includes an investment in strengthening the RAC/NAT, which was designed and operationalized under CSIDS-SOILCARE Phase 1 as part of the PISLM to promote and build climate smart and climate resilient agricultural systems in CSIDS, as well as to develop and test new adaptation technologies which can inform SSM, SLM and support the attainment of LDN in CSIDS. The RAC/NAT will be upgraded under Phase 2 to support project implementation and to become the premier institute to lead the research and development agenda on soils and land in the region, and to provide evidence for science-based policy development that facilitates the mainstreaming of the latest developments in innovative agricultural technologies and approaches for LDN into the national and regional policy making process. An important part of the RAC/NAT activity will be to develop forefront research on topics that relate to the CSIDS-SOILCARE and on cutting-edge technologies for SSM and SLM, for which collaborations will be established with regional Universities and global research programs. These international collaborators are expected to make further use of the information produced by the CSIDS-SOILCARE Phase 1 through the creation of a Caribbean Soil Archive and Library under the RAC/NAT, in collaboration with strategic partners, which will host the soil samples and databases produced by the CSIDS-SOILCARE program. It will also design and host an annual Regional LDN/SSM/SLM Research Conference to provide a forum for Caribbean researchers, scientists, project managers, and the private sector to share research findings and best practices from the work under the CSIDS-SOILCARE and other initiatives across the region.

61. The RAC/NAT will also lead the design and coordination of an ambitious and cross-cutting capacity development programme, which will be monitored closely to ensure actions remain relevant and effective, consisting of training modules and technical sessions targeted a diversity of audiences, namely: primary and secondary schools, extension services and planning departments, grassroots organizations, academia, the private sector, youths, women, indigenous people, and policy makers. With a vocation to become a stable program after the project ends, topics included are, *inter alia*, soil chemistry and soil health, soil survey and sampling, SSM and SLM, development and use of drought-tolerant landraces, sustainable agriculture and innovations in agriculture for LDN and resilience, and LDN target setting and reporting. Resources will also be provided for advanced training through Continuing Professional Education programs offered at Caribbean universities.

62. Specifically, CSIDS-SOILCARE PHASE 2 adds to achievements of Phase 1 by:

- ***Increasing technical capacity for soil data production and assimilation:*** through the Caribbean Soil Laboratory Network (CARSOLAN) created under CSIDS-SOILCARE Phase 1, soil laboratories in participating countries were upgraded to Tier 1 of analytical capacities. In Phase 2, those laboratories will be supported to achieve Tier 2, thus increasing the range of physical and chemical properties analysed and their quality control and quality assurance capability, as well as training of personnel. Countries new to the program will be assessed and strengthened to Tier 1.

- **Strengthening evidential basis for decision-making**: Soil information has been considerably enhanced for Phase 1 countries, protocols and agreements have been established for the integration of soil data in the CARSIS, for which a relational database structure has already been developed. Information from Phase 2 countries will be uploaded to the CARSIS and made available to stakeholders, strengthening their capacity for decision-making.

- **Further augmenting the skills and expertise in the region on soil science and climate smart agriculture**: CSIDS-SOILCARE Phase 1 laid the foundation by training national teams in soil mapping and analysis, technical aspects of SLM and SLM and CSA practices. CSIDS-SOILCARE Phase 2 builds on this by expanding the use of soil data, through the Caribbean Soil Information System (CARSIS), and scaling SSM and CSA interventions to support broader climate resilience and sustainable land management.

- **Further mitigating fragmentation in policy and practices of stakeholders through supporting the development of the regional policy framework for LDN and the establishment and enhancing of formal and informal networks on LDN**: Phase 1 initiated the collaboration with CARICOM's COTED, and

established key networks such as CSSG, SSLMFG and CARSOLAN. In CSIDS-SOILCARE Phase 2, these efforts will be further strengthened by enhancing the functionality of these networks, through support to the development of a harmonised regional policy framework for LDN reporting, promoting international cooperation for regional-scale drought management and risk reduction, and integrating regional knowledge platforms like the Knowledge Hub into UNEP's SIDS-SIDS Hub to foster cross-sectoral and cross-country coherence.

- **Further increasing awareness and understanding of the impact of land degradation on livelihoods** – Phase 1 raised awareness through targeted communication and visibility campaigns and strong community engagement in Components 2-4. CSIDS-SOILCARE Phase 2 builds on this by strengthening outreach efforts, utilizing existing networks and aligning messaging with global frameworks.

63. **CSIDS-SOILCARE Phase 2 also considers and builds on other ongoing/previous investments (GEF and non-GEF) in the country/region.** It is designed as a strategic, integrative initiative that builds on the technical, institutional, and policy foundations laid by numerous regional and national projects across the 14 countries (see Annex H for project details). It leverages lessons learned, fills critical gaps, and scales successful interventions to promote SSM, LDN, and climate-resilient food systems.

64. At the technical level, activities to upgrade soil laboratories, standardize quality assurance protocols, and expand digital soil mapping and decision-support systems build directly on data infrastructure developed through projects such as Jamaica's "Improving Climate Data and Information Management (World Bank)," Belize's "Mainstreaming Biodiversity in Belize`s Maya Golden Landscape (GEF ID 10815)," and The Bahamas' forest monitoring initiatives (GCF). By harmonizing soil and climate data, CSIDS-SOILCARE Phase 2 augments capacities for evidence-based planning and investment readiness across the region.

65. Institutionally, CSIDS-SOILCARE Phase 2 strengthens policy coherence and regional collaboration. It supports multi-stakeholder dialogues and mainstreams LDN and SSM into national development frameworks, drawing from adaptation planning efforts in Belize, Grenada, and Saint Lucia. The project also aligns with regional initiatives like ASLAC and the Global Soil Partnership, ensuring that Caribbean SIDS benefit from global best practices and harmonized soil governance.

66. In terms of climate resilience, CSIDS-SOILCARE Phase 2 complements water-focused projects such as Barbados' South Coast Water Reclamation Project (GCF), Grenada's G-CREWS (GCF/GIZ), and The Bahamas' Climate Resilient Water Sector initiative (GCF). It introduces drought- and flood-smart land and water management practices, enhancing the effectiveness of reclaimed water and irrigation systems while restoring degraded landscapes.

67. CSIDS-SOILCARE Phase 2 is deeply committed to gender equality, youth empowerment, and inclusive development. It integrates gender-sensitive protocols, women-led demonstration sites, and youth entrepreneurship programs, building on inclusive models from the GCAF project (Global Affairs Canada), Jamaica's SPIRO initiative (World Bank), and the Farmers' Organizations for ACP Action (IFAD). These efforts ensure that vulnerable groups are central to climate adaptation and agricultural transformation.

68. The project also supports value chain development and market competitiveness. It provides soil fertility maps and restoration strategies to enhance productivity in cocoa, vegetable, and hot pepper sectors, complementing initiatives like ASPIRE in Grenada (GEF ID 11374), the *Strengthening the foundations for a specialty cocoa sector in the Caribbean* project (FAO), and Jamaica's *Improving Phytosanitary, Food Safety and Market Access Opportunities along the Hot Pepper Value-Chain projec*t (FAO). The LDN Transformative Funding Mechanism created and deployed under the CSIDS SOILCARE program mobilizes capital for smallholder and youth-led enterprises, unlocking private-sector investment in climate-smart agriculture.

69. Innovation and technology transfer are key pillars of CSIDS-SOILCARE Phase 2. It pilots smart irrigation, and protected agriculture, scaling up successful interventions from projects in Barbados, The Bahamas, and Trinidad and Tobago. These technologies are embedded within broader soil and land restoration frameworks to ensure long-term sustainability.

70. Finally, CSIDS-SOILCARE Phase 2 contributes to ecosystem restoration and biodiversity conservation. It complements projects like BioSPACE (European Union), Saint Lucia's forest restoration efforts, and The Bahamas' mangrove integration initiatives by rehabilitating degraded lands and promoting agroforestry and nature-based

solutions. Through integrated land-use planning and regional knowledge-sharing platforms, CSIDS-SOILCARE Phase 2 ensures that environmental sustainability is embedded in agricultural and development strategies.

Incremental cost reasoning

71. CSIDS-SOILCARE Phase 2 delivers substantial added value by scaling up, deepening, and institutionalizing the achievements of Phase 1, while strategically integrating lessons from other regional initiatives. Its incremental benefits span technical, institutional, environmental, and socio-economic dimensions, positioning it as a transformative force for sustainable land management and climate resilience across Caribbean SIDS.

72. At the technical level, CSIDS-SOILCARE Phase 2 upgrades 14 national soil laboratories, harmonizes QA/QC protocols, and establishes a Regional Reference Laboratory—addressing long-standing gaps in data comparability and analytical capacity. It expands the Caribbean Soil Information System (CARSIS) and integrates six new countries, enabling region-wide access to high-resolution soil data and decision-support tools. This leap in data infrastructure supports evidence-based planning, monitoring, and reporting on LDN and climate adaptation.

73. Institutionally, CSIDS-SOILCARE Phase 2 strengthens regional cooperation through the CSSG, mainstreams LDN into policy frameworks, and promotes sub-regional platforms for drought and flood risk mitigation. It supports the development of standardized procedures for LDN TSPs and contributes to regional policy decisions through COTED, ensuring that soil and land management are embedded in broader development agendas.

74. Environmentally, the project restores over 1,788.6 hectares of degraded land and improves practices on more than 11,692.9 hectares, contributing to significant reductions in greenhouse gas emissions (1,250,867 tCO_2e) and pesticide use. It enhances soil organic carbon (SOC) and biodiversity in demonstration sites, improves water infiltration and retention, and increases land productivity—delivering tangible ecosystem benefits and resilience against climate shocks.

75. Socio-economically, CSIDS-SOILCARE Phase 2 empowers over 9,390 beneficiaries through capacity development, including women, youth, and Indigenous Peoples. It expands the Soil Doctors Programme to all 14 countries, integrates soil health into extension services, and supports youth-led agribusiness initiatives through YARDI and YABI. The LDN Transformative Funding Mechanism (TFM) mobilizes capital for climate-smart investments, unlocking new livelihood opportunities and market access for smallholders.

76.

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B. PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

The project design ensures resilience to future deleterious changes and supports adaptive management by embedding flexibility, continuous learning, and stakeholder engagement throughout its implementation. CSIDS-SOILCARE Phase 2 will incorporate scenario planning and risk assessments into its' monitoring and evaluation framework to adapt project activities to shifts in climate, socio-economic conditions, and the policy landscape. In addition, diversified strategies, such as nature-based solutions and livelihood options, will be employed where feasible to reduce vulnerability to shocks. Other strategies such as supporting strong stakeholder participation and capacity building to foster local ownership and responsiveness, and alignment with national policies will ensure institutional coherence and long-term sustainability.

Theory of change

77. The project's Theory of Change (Figure 1) consists of four (4) casual pathways that are based on five (5) thematic but synergic components, designed to effectively address the key barriers to achieving a holistic LDN-based resilience scenario as identified in the Project Rationale. The four (4) levers for transformational change listed in the GEF-8 Programming Directions: governance and policies, financial leverage, innovation and learning, and multi-stakeholder dialogues (GEF 2022)[27][27] are embedded in the project's design, aimed at triggering transformational change towards a region-wide climate-resilient developmental strategy that pursues LDN and enhances biodiversity, as follows:

Causal pathway 1: **IF the available soil information of the participating countries, and their capacity for producing and managing soil data is improved, THEN Caribbean countries will use up-to-date and accurate soil information for planning and decision making at all levels. Involving components 1 and 5. Component 1 transformational capacity is based on its enabling nature, because up-to-date, reliable and accessible**

information on soils is essential at all levels of governance, and particularly within the planning and policy spheres. Principle 15 of the LDN framework on *making use of the three (3) land-based indicators and associated metrics:* land cover (assessed as land cover change), land productivity (assessed as Net Primary Production) and carbon stocks (assessed as SOC), is directly addressed by this Casual Pathway, as well as Principles 16-19 on monitoring.

Causal Pathway 2: **IF interventions to avoid, reduce and reverse land degradation and to reduce climate risk are demonstrated following LDN-focused land use plans that promote adaptation, with the necessary technologies made available, THEN land degradation will be reduced and stakeholders will change their behaviour towards LDN and climate resilience, involving components 2, 3 and 5. In addition to the immediate Global Environmental Benefits that Components 2 and 3 will deliver, the activities will employ multi-stakeholder and multilevel participatory planning strategies to promote enduring engagement of beneficiaries, ensuring the tenure rights of vulnerable communities when land is targeted for restoration. The benefits of the on-the-ground implementation of SSM, SLM and other technologies for drought and flood resilience at a local scale will be monitored and results communicated, in synergy with Component 5, and the lessons learned will be the basis of the design of outscaling strategies to the landscape level and beyond as per Causal pathway 4. Principle 1 of the LDN framework on maintaining or enhancing land-based natural capital, and Principles 6, 12, 13 and 14 on integrated and participatory land planning and good governance are essential to this process.**

Casual pathway 3: IF transformative finance systems that improve access to financial instruments are implemented and innovations that widen livelihood options and create opportunities and resilience along all the steps of the value chains become available, THEN SSM/SLM are scaled out 5,220 ha. Involving components 4 and 5. This Casual Pathway is directly related to Principle 10 of the LDN framework on balanced economic, social, and environmental sustainability.

Causal pathway 4: **IF stable educational, research and innovation programs become available, the benefits of LDN-focused SSM and SLM are communicated through enhanced knowledge management structures, and policy frameworks are improved, THEN improved policy, innovation and learning lead to transformational change towards LDN. This causal pathway is embodied by Component 5 of the project and is cross-cutting to all project actions.**

78. **The combined delivery of these causal pathways will produce long-lasting improvements in land degradation status and trends, and LDN and climate resilience will be achieved in CSIDS.**

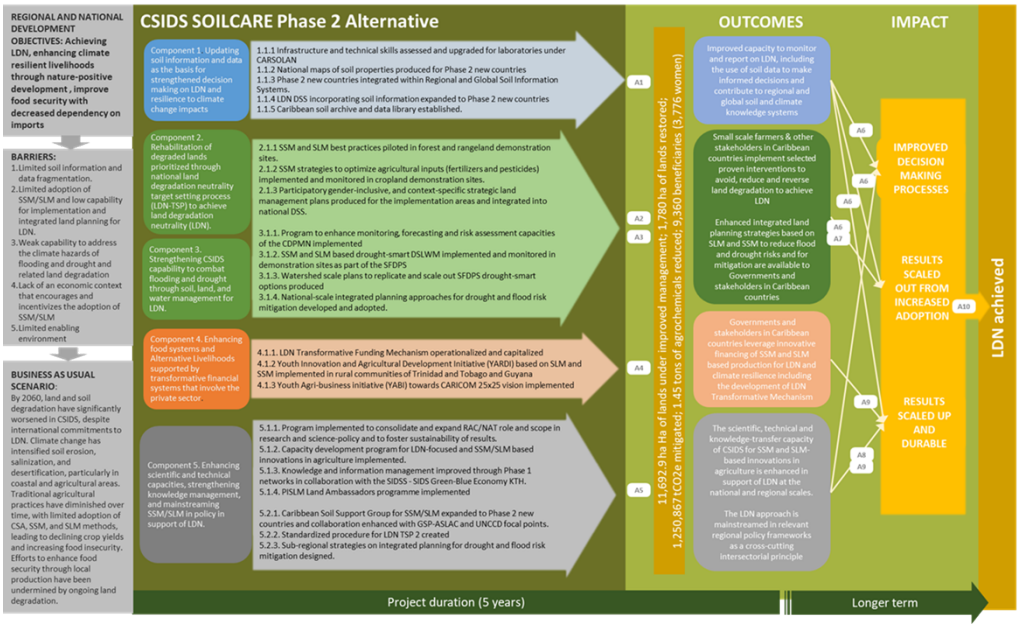


Figure 1: Theory of Change

Project Level Assumptions:

- **A1. There is willingness of key ministries and other institutions to collaborate and share information**
- **A2. Project stakeholders are aware of the LD problem and are committed to improvement.**
- **A3. Project stakeholders see benefits in increasing land resilience to climate impact**
- **A4. Project support is sufficient to trigger and incentivize private entities investment.**
- **A5. There is political will to enhance innovation and to mainstream LDN in policy and legal frameworks at national and regional levels**

Impact Assumptions:

- **A6. Behaviour of a wide range of stakeholders changes towards SSM/SLM for LDN**
- **A7. The private sector realizes of the value of gender-sensitive SSM/SLM-based value-chains and continues to make investments that scale best practices out.**
- **A8. Necessary policies and legal instruments are in place to enable upscaling to the regional scale.**
- **A9. Innovation for LDN becomes mainstream into productive sectors**
- **A10. Continued support to SSM and SLM for LDN and climate resilience from stakeholders**

Detailed description of project components

COMPONENT 1: UPDATING SOIL INFORMATION AND DATA AS THE BASIS FOR STRENGTHENED DECISION MAKING ON LDN AND RESILIENCE TO CLIMATE CHANGE IMPACTS, addresses Barrier 1: *Limited soil Information to support decision-making processes on LDN and data fragmentation.*

79. This component will enable countries not included in CSIDS-SOILCARE Phase 1 to operationalize LDN in each country, through updated data on soils and improved capacities for data production, with an emphasis on laboratory assessments and national soil surveys. The six (6) new participating countries will build on the tools and approaches developed and field tested in Phase 1 to ensure that, by the end of Phase 2 all participating countries have updated and reliable soil information. This is a fundamental step in support of the national LDN TSPs, facilitating improved planning that enables the application of the counterbalancing principle of through the avoid-reducing-restore hierarchy of actions, as well as an improved reporting to the Convention. The new

data will also strengthen the capability of CSIDS to manage soil, land, and water resources, through improved ecosystem services, such as increased food production, in line with the regional 25% by 2025 policy and towards increased food security; better landscape-scale hydrological regulation, thus combating drought and flood risk; and enhanced support and habitat for biodiversity, contributing to overall ecological health and resilience. The increased capacity for data production is an element for durability and sustainability of approaches, promoting long-term efforts to mitigate land degradation and desertification.

80. For that, analytical infrastructure and technical skills will be upgraded for the National Soil Laboratory[28] of each beneficiary country (output 1.1.1), under the CARSOLAN established under CSIDS-SOILCARE Phase 1. After a systematic country-wise assessment of capacities (activity 1.1.1.1), the six (6) countries new to the CSIDS-SOILCARE will get support as needed (activity 1.1.1.2) to achieve at least Tier 1 analytical level, while the eight (8) countries of Phase 1 will see their capacities upgraded to an advanced Tier 2, including the standard operating procedures and harmonized quality control/quality assurance (QC/QA) protocols of the Global Soil Laboratory Network. This will include the development of technical capacities of laboratory staff through dedicated trainings on QC/QA and standard operating procedures (activity 1.1.1.3).

The implementation of consistent QC/QA procedures nationally and regionally[29][28] will require strengthening the CARSOLAN infrastructure (activity 1.1.1.4). A Regional Reference Soil Laboratory will be established and commissioned that will be the CARSOLAN headquarters laboratory. The CARSOLAN Steering Committee will provide support to the Regional Reference Soil Laboratory through technical backstopping, assisting with coordination of the QC/QA, and with scientific and input into the design and execution of capacity building initiatives. The Steering Committee will also develop the CARSOLAN plan of action that will ensure development of technical capacities and consider financial sustainability.

Further, and cognizant of the challenges experienced during CSIDS-SOILCARE Phase 1 to move soil samples within the region, the CARSOLAN Steering Committee will draft a Regional Protocol for the safe and efficient movement of soil for analytic purposes across the SOILCARE countries (activity 1.1.1.5) in collaboration with the National Plant Protection Organizations and other phytosanitary stakeholders, to be submitted to COTED for adoption.[30][29]

81. Following a similar approach used in the CSIDS-SOILCARE Phase 1, national digital soil maps will be produced for each country (output 1.1.2). To that end and taking on board the lessons learned in Phase 1, national soil surveys will be designed (activity 1.1.2.1) and carried out (activity 1.1.2.2), and samples analyzed to generate new soil data for the six (6) countries new to Phase 2 (activity 1.1.2.3), including SOC, as the basis for LDN implementation and to support monitoring and reporting. The soil data will be used, together with the national soil legacy and environmental information on soil formation factors, to produce digital maps of soil properties (activity 1.1.2.4). National capacities on Digital Soil Mapping of soil properties and soil suitability following the Global Agroecological Zoning methodology[31][30], and on modelling of SOC sequestration potential will be developed through the RAC/NAT, through its Geoinformatics Unit (which will be created as part of output 5.1.1), for which the RAC/NAT staff will be trained on those topics (activity 1.1.2.5) and then support the countries in the development of soil maps.

82. The six (6) new countries of Phase 2 will join the CARSIS (output 1.1.3), a data sharing mechanism created under Phase 1 that includes an online regional LDN decision support tool. In phase 2, the newly produced data and maps will be integrated (activity 1.1.3.1). Moreover, recognizing the lack of an enabling policy environment for data governance within the CARSIS and the potential research benefits of integration with other regional and global soil information systems, CSIDS-SOILCARE Phase 2 builds on the achievements of the previous project to address this fundamental gap through the creation of an enabling policy framework for data management and sharing within CARSIS (activity 1.1.3.2). This enhances the data-sharing among participating countries and reflect their shared commitment to mainstream land degradation neutrality objectives into sub-regional policy, ensuring that decisions taken at the sub-regional level are effectively translated into coordinated national regulations. The framework governs the inclusion of further information from the eight Phase 1

countries and integrate the 6 new countries of Phase 2 into the system. The mid-term goal is to build a harmonized and standardized data repository that includes all the CARICOM countries and is fed with new data on a continuous basis. Data will made publicly available through the decision support online tool (output 1.1.4), as per the provisions and protocols on data-sharing and data access of the reached agreement, to facilitate decision making by stakeholders at the sub-regional scale.

83. This system (the wider CARSIS and its online decision support tool) is expected to be eventually linked to other regional and global soil and land information systems, specifically the FAO Global Soil Information System (GLOSIS) and its daughter, the Soil Information System for Latin America and the Caribbean (SISLAC), but to also other data-sharing initiatives and land-related information systems. The fact that Antigua and Barbuda, the Commonwealth of Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines are OECS countries brings the opportunity to approach the integration of CARSIS within other regional and global information systems in a phased manner, commencing with a Subregional Data Integration and Sharing initiative with the OECS Commission (activity 1.1.3.3) that will seek interoperability and data-sharing between the CARSIS and the current initiative for data harmonization and sharing of the OECS, funded by the European Union under the 11th European Development Fund (EDF) and implemented as part of its Component 9: The Empowerment of the OECS through Data of the OECS Regional Integration Through Growth Harmonisation and Technology (RIGHT) Programme. Importantly, this is not a separate initiative, but part of the CARSIS implementation strategy. The management of the shared database will thus be under PISLM structure, and funding for its continued operation is expected to come from OECS and CARICOM programs, once the data-sharing agreement(s) is approved.

84. To make data accessible to stakeholders and to facilitate decision-making, an online tool to support decision making on LDN (LDN-DSS) was created in Phase 1, linked to CARSIS, that is capable of fetching information from different sources and performing multicriteria analysis of LDN-related topics. The LDN-DSS will be expanded to six (6) new countries in Phase 2 (output 1.1.4), with legacy and newly generated maps included and displayed (activity 1.1.4.1). In order to promote optimal use of the LDN-DSS, national technical staff will be trained in the system use for LDN and planning (activity 1.1.4.2), as part of the capacity development coordinated by the RAC/NAT's Geoinformatics Unit, which will count with staff trained on the LDN-TSP and PRAIS reporting process that will assist CSIDS in improving landcover and land productivity maps (activity 1.1.4.3) through enhanced participatory data processing and ground-truthing, and will use the tool to support the production of the national land degradation reports to the UNCCD (activity 1.1.4.4).

85. The project will also invest in creating the Caribbean Soil Archive and Data Library, the first of its kind in the region (output 1.1.5). It is an innovative initiative for creating a curated collection of soil samples and the related data that will include in first instance the samples and data from the CSIDS-SOILCARE Phase 1 and 2, to serve as a reference for soil research and agricultural innovation in SSM/SLM and agriculture in the Caribbean and globally. The Archive will be integrated into the RAC/NAT (see output 5.1.1) and linked to the CARSOLAN and other strategic partners, such as the regional Universities, and will be set up in an appropriate facility *tbd* (activity 1.1.5.1). The related Library (activity 1.1.5.2) will contain geolocation, field and analytical data, and metadata for each of the samples of the archive and will be linked to the CARSIS. A validated protocol for access and use of the Soil Archive and Data Library will be developed, to ensure structured governance and controlled access, and expectation is that the initiatives (including developmental and research projects) using the Archive and Library resources, as well as corporate users, will be the main financing assets for their maintenance.

COMPONENT 2: REHABILITATION OF DEGRADED LANDS PRIORITIZED THROUGH NATIONAL LAND DEGRADATION NEUTRALITY TARGET SETTING PROCESS TO ACHIEVE LDN builds on CSIDS-SOILCARE Phase 1, to address Barrier 2: *Limited adoption of SSM/SLM and low capability for implementation and land planning for LDN.*

86. Under Output 2.1.1 of this component, restoration and SSM and SLM practices will be implemented in demonstration forest and rangeland sites within the project implementation areas. The aim is to enhance the status of land and its associated ecosystem services while avoiding further net loss of land through the targeted application of the avoid-reduce-restore hierarchy of actions of the LDN framework.

87. Activities will include participatory assessment and selection (activity 2.1.1.1), and implementation (activity 2.1.1.2) of specific options for restoration e.g. reforestation and/or assisted natural revegetation, SSM and SLM

in demonstration sites. This will involve the promotion of suitable traditional practices, which will be recorded and assessed, and/or the adoption of new and innovative approaches for protecting and restoring land and soil ecosystems on which communities depend. The use of climate resilient technologies, methods and approaches will be promoted as part of the rehabilitation process. Plant propagation facilities will be strengthened/created (activity 2.1.1.3) to provide seeds/seedlings to restoration and improved management efforts. Drought tolerant landraces will have a dedicated chapter in that regard, in coordination with the Small Farmers Drought Mitigation Scheme of Component 3 and the research on the topic by the RAC/NAT under Component 5. Specifically regarding Indigenous Peoples, the activity of this component will allocate resources to the support the implementation of the Indigenous Peoples Land Restoration Initiative (activity 2.1.1.4) proposal developed by the LDN Indigenous Peoples Forum under CSIDS-SOILCARE Phase 1. The initiative is based on SLM and aims to support land restorative activities, with a focus on sustainable and resilient livelihoods through improved forest and cropland management.

88. Specifically in croplands, SSM strategies to optimize the use of agrochemicals (fertilizers and pesticides) will be promoted (output 2.1.2), to avoid the negative effects of their inappropriate use, considering the use of biostimulants and biofertilizers to reduce agrochemical inputs. Site-specific Integrated Pest Management and Integrated Soil Fertility Management strategies will be selected through participatory approaches after assessment of the characteristics of each demonstration site (activities 2.1.2.1 and 2.1.2.2) and implemented (activity 2.1.2.3) as per intervention plans co-designed with stakeholders that will include procurement plan and budget and execution timeline. Soil health-related effects and the cost-benefit ratios of all the implemented strategies will be under rigorous monitoring (activity 2.1.2.4) through systematized instruments based on the FAO *Protocol for the Assessment of SSM*[32][31] (hereafter the SSM Protocol), the C-SAC tool for climate smart agriculture and the *Cost–benefit analysis for climate change adaptation policies and investments in the agriculture sectors*[33][32] manual developed under CSIDS-SOILCARE Phase 1. This action includes continuing monitoring activities in Phase 1 sites, so the effects of the practices implemented can be tracked in the longer term and the results of the monitoring exercise be used for outreach purposes.

89. The implementation of SSM practices and the monitoring of their effects will be supported by capacity development actions (activity 2.1.2.5) that will include the Soil Doctors Programme[34][33] and training on the implementation of the SSM Protocol.

90. Due to the lack of existing guidelines for the use of bio-inputs (biofertilizers, biostimulants and biopesticides), a regional tailored guideline for the use of such products, covering application rates, timing, and methods to optimize crop productivity and soil health across diverse agricultural settings, will be developed (activity 2.1.2.6) and refined through field trials (in synergy with the activity of the RAC/NAT under component 5). The outcome will be a regionally adaptable, evidence-based guide for the effective and sustainable use of bio-inputs in soil amendment practices, promoting long-term improvements in soil health and land productivity, while mitigating land degradation. This directly contributes to the attainment of CARICOM's 25x2025 initiative.

91. Participatory, gender sensitive and context-specific strategic plans for land management will be produced (output 2.1.3) that enable scaling the approaches demonstrated under outputs 2.1.1 and 2.1.2 to wider implementation areas. The plans will be prepared after multicriteria assessments of each of the wider implementation areas (activity 2.1.3.1), which will be carried out using the DSS infrastructure from Component 1 and the Global Agroecological Zones methodology[35][34] to produce land use and crop suitability maps that underpin scaling-out strategies. An important part of this activity will be the identification of alternative livelihood options for communities to ease the pressure being exerted on the natural resource base within the area. The promotion of these opportunities will be based on detailed evaluation of the specific socio-economic context and linked to the investments foreseen under Component 4. The outscaling strategies will be designed based on the principles of Integrated Land Use Planning (activity 2.1.3.2), thus adopting a bottom-up approach that accounts for age, gender, and cultural norms and assesses key roles and responsibilities of men, women, and

youth as well as the priorities of the different groups in the land use planning process. Local knowledge will be leveraged for the planning process.

92. This component will place special emphasis on equitable distribution of the project's benefits to women, youth, and indigenous peoples where applicable, as well as other vulnerable groups such as young males in several countries in the Caribbean. Monitoring mechanisms will be embedded in the process, to track participation and ensuring equitable benefit-sharing.

COMPONENT 3: STRENGTHENING CSIDS CAPABILITY TO COMBAT FLOODING AND DROUGHT THROUGH SOIL, LAND AND WATER MANAGEMENT FOR LDN, builds on existing monitoring tools, such as the Regional Precipitation Outlook produced by the Caribbean Institute for Meteorology and Hydrology (CIMH), to address Barrier 3: *Weak Capability to Address the Vulnerability to the Climate Hazards of Flooding and Drought and Related Land Degradation.*

93. Under Component 3 the project will, firstly, implement a program to enhance monitoring, forecasting and risk assessment capacities of the CDPMN (output 3.1.1), including updated methods and services of the CDPMN (activity 3.1.1.1) to advance towards an integrated, strengthened and gender sensitive multi-hazard monitoring system through the expansion of drought and flood indices catering to the needs of the Caribbean. This necessitates the mapping of sectors and stakeholders and risk and gender sensitive impact assessments, including the development of databases for stakeholder-specific vulnerability assessments, which will be the basis for the preparation of a feasibility plan for real time data acquisition systems to monitor risk levels (activity 3.1.1.2). Data acquisition systems will be procured and installed (activity 3.1.1.3) and operational satellite-based vegetation indices workflow, such as Normalized Difference Vegetation Index and Soil Adjusted Vegetation Index will be developed for target areas (activity 3.1.1.4). The project will provide technical backstopping to the development of country specific drought-related index maps and outlooks (activity 3.1.1.5), representative of conditions at the national/local level and that enable the definition of trigger thresholds to enable proactive risk management, based on the risk and impact assessment. The data and information emanating from these systems will be the basis for improved decision making and enhanced communication protocols and systems to issue sector-and stakeholder-specific early warnings and will be fed into the CARSIS and the DSS implemented under component 1 (activity 3.1.1.6). Extension and technical officers will be trained (activity 3.1.1.7) to interpret country specific drought indices and drought outlooks to support the issuing of early warning and impact-based mitigation measures specific to the agriculture sector stakeholders, based on the severity of the drought risk forecasted.

94. In recognition of the challenges associated with drought in the region and the important role of smallholder agricultural production in the CSIDS economy, an intervention aimed at building capacity for drought resilience - the Small Farmers Drought Mitigation Scheme will be implemented across eight (8) countries - St Kitts and Nevis, Grenada, Trinidad and Tobago, Guyana, St. Vincent and the Grenadines, Dominica, Antigua and Barbuda, and The Bahamas (output 3.1.2). These states represent the wide variances of biophysical and climatic conditions across CSIDS, thus, increasing the generalizability and the capacity for further adoption and replication of best practices and suitable technologies across the region. Key actions include the conduct of a drought susceptibility and technology and capacity needs assessment (activity 3.1.2.1) to build resilience to drought, including the biophysical profiling of intervention areas across the target countries, and the compilation of a suite of mitigation options in line with SSM/SLM and drought smart land and water management approaches, based on the evaluation the areas (activity 3.1.2.2). Practices may include actions to enhance water access, use and efficiency; reduce evapotranspiration, water demand and plant stress; increase soil moisture content and its hydrological regulation capacities through soil recarbonization; and the overall productivity/yield of cultivated crops. The implementation of practices will be supported and complemented by training on soil-related aspects through the Soil Doctors Programme (activity 3.1.2.3) and on the implementation of the SSM Protocol, as well as on the Climate-Smart Agriculture Compliant (C-SAC) self-assessment climate tool[36][35].

95. This will inform the preparation and implementation of drought mitigation plans for each demonstration site (activity 3.1.2.4), as part of the Small Farmers Drought Mitigation Scheme, involving the selection of best suited options SSM options based on a participatory stocktaking and multicriteria assessment of feasibility and benefits to address the risks and impacts of hydrological and agricultural drought. A rigorous monitoring

protocol (activity 3.1.2.5) to measure the drought risk reduction and resilience building potential, LDN compatibility, livelihood benefits and the carbon stored or sequestered linked to the mitigation measures will be implemented at the site scale. The results will be used towards improved management of the site, but also to inform the related RAC/NAT research (under component 4) and as demonstration towards outscaling (through communication and knowledge transfer under component 5).

96. Gender-sensitive watershed-scale plans to replicate and scale out Small Farmers Drought Mitigation Scheme drought-smart options will be produced (Output 3.1.3) through participatory methods (activity 3.1.3.1), based on the work in the demonstration sites and connected to monitoring indices and trigger thresholds elaborated previously. A key aspect of the will be the integration of management practices as user friendly and ready-to-use *techpacks* (activity 3.1.3.2), to promote the uptake of effective mitigation technology and practices.

97. Recalling the UNCCD COP 11/Decision 36 which underscored the imperative of mitigating the impacts of drought through the development of national drought policies and plans as a pathway to LDN, and subsequent Decisions, this Component places particular focus on assisting countries to improve national capacities on integrated planning for drought and flood risk mitigation. This will be achieved through the development of national integrated plans for drought and/or flood management (output 3.1.4) based on the enhanced monitoring and early warning methods, risk assessment, and evidence-based mitigation options, aligned with national regulatory framework priorities, in particular LDN targets, sustainable land and water management, nationally determined contributions (NDCs), NAPs, and national development agendas. National multistakeholder mechanisms will be implemented and institutionalized (activity 3.1.4.1) that coordinate drought/flood action at the national level and discuss and draft the plans (activity 3.1.4.2). Technical capacities will be improved through training programs on the content of the drought/flood management plans (activity 3.1.4.3), including extension services and grassroots organizations with knowledge on SLM/SSM and drought-smart land and water management practices. Further, participatory exercises of validation of hazard-specific plans will be carried out through stakeholder roundtables (activity 3.1.4.4). This approach is consistent with the Sendai Framework and SDG Target 13.3.

98. The results and lessons learned from the foregoing activities will serve as inputs for the preparation of sub-regional strategies on integrated planning for drought and flood mitigation, which will be addressed under component 5.

COMPONENT 4: ENHANCING FOOD SYSTEMS AND ALTERNATIVE LIVELIHOODS SUPPORTED BY TRANSFORMATIVE FINANCIAL SYSTEMS THAT INVOLVE THE PRIVATE SECTOR addresses the necessary financial aspects for facilitating a broad adoption of climate resilient agricultural measures that avoid, reduce and reverse land degradation through the operation of the LDN TFM created under CSIDS-SOILCARE Phase 1. It therefore responds to *barrier 4: lack of an economic context and financial instruments that encourage and incentivize the adoption of SSM /SLM.*

99. Actions under component 4 will provide increased access to financial instruments that facilitate the adoption of SSM and SLM within business strategies and operations, particularly at the smallholder level, through the design of innovative and transformative financial instruments such as an LDN TFM. In addition, since market-based instruments are key leverage points towards enabling profitable implementation of SLM and SSM, Component 4 includes activities that reinforce existing livelihood options. This is necessary to create new opportunities and to provide resilience against climate and other external impacts by improving all steps within agricultural value chains and incorporating measures for adaptation and mitigation of impacts.

100. This component focuses on the complete operationalization of the LDN TFM (output 4.1.1) designed under CSIDS-SOILCARE Phase 1, as a means for leveraging finances towards SSM and SLM for increasing the resilience of production systems to climate impacts, while contributing to achieve LDN in the Caribbean. A roadmap for the activity of the LDN TFM including annual workplans will be drafted (activity 4.1.1.1) based on multistakeholder dialogues, to facilitate its further capitalization and implementation. The roadmap will include the identification and design of a medium to long-term strategy for country and regional-scale instruments to engage private bodies, with consideration to large private corporations operating in the region (e.g. Massy Group, Marriott International, Hilton Hotels & Resorts) and to find opportunities for collaboration with existing national mechanisms to channel investment such as citizenship by investment programs. Using the results from investment initiatives under CSIDS-SOILCARE Phase 1 and 2, and other relevant data and information, high performing investments/bankable projects that are transformative in nature will be brought to the capital

market through the mobilization of financing from the private sector and other innovative sources (activity 4.1.1.2) by the LDN Funding Mechanism. This innovative approach further addresses a core barrier to the adoption of SSM and SLM in the region – the low access to sustained forms of financing. Resources from the CSIDS-SOILCARE Phase 2 project will be used as seed money that will serve to catalyse the fund's capitalization process. In this regard, as part of this proposal, the participating countries have all agreed to allocate approximately US$ 105,000 from the STAR resources to the capitalization of the fund as per Decision #7 adopted at the PISLM High Level Forum in March 2023. The LDN TFM will include technical support to the development of the selected projects, thus ensuring viability and increasing success rate.

101. Component 4 also targets also youth involvement in, and adoption of SSM/SLM, which is a core focus of CSIDS-SOILCARE Phase 2. Youths will be targeted through implementation of two different initiatives that will serve as a catalyst for youth agricultural entrepreneurship and create opportunities for the promotion of science and technology in agriculture, while addressing the aging farmer population.

102. The YARDI (output 4.1.2) is an innovative apprenticeship programme targeting at-risk youths in rural communities of Trinidad and Tobago and Guyana who have recently left school, to foster an interest in sustainable agribusiness. This will be done through a hands-on work experience and mentorship provided by a cohort of farmers and other experts located within the community and/or the broader area (activity 4.1.2.1). YARDI will also provide training in agribusiness skills (activity 4.1.2.2) to enhance youths' capacity to establish and operate future micro, small and medium size enterprises (MSMEs).

103. On the other hand, the YABI (output 4.1.3) aims to support the creation of youth-led MSMEs that integrate SSM and SLM technologies in all 14 countries, designed to support attainment of LDN and the CARICOM 25x25 regional policy. Young people across the region will be supported to create youth-led MSMEs. For that, youths will be provided with mentoring and training (activity 4.1.3.1) to design agri-business projects and in a wide range of related areas. After a rigorous review and approval process, including adoption of accepted fiduciary processes to ensure that proposed business ideas have high potential for success and future scale up, funds will be allocated through microloans (activity 4.1.3.2) to provide start-up investment for the selected youth-led innovative and SSM/SLM-based agricultural business projects.

104. YARDI and YABI will feed the pipeline of projects of the TFM, while a percentage of its annual work program will be specifically assigned to youth-led initiatives, thus acting as an element for sustainability of the YARDI and YABI, and for increased impact. Implementation of both youth programs will be handled through contracts, with the overall supervision of the Business and finances consultant of the Executing Agency, with support from the Gender Consultant and the ESS specialist.

COMPONENT 5: ENHANCING SCIENTIFIC AND TECHNICAL CAPACITIES, STRENGTHENING KNOWLEDGE MANAGEMENT AND MAINSTREAMING SSM/SLM IN POLICY IN SUPPORT OF LDN directly addresses Barrier 5: *Limited enabling environment.*

105. This component is expected to foster the out- and upscaling of SLM and SSM implementation for LDN at the national and regional levels, by enhancing scientific, technical and knowledge transfer capacities (outcome 5.1), including, *inter alia*, further development, testing and application of SSM and SLM technologies to increase resilience to the drivers of land degradation and extreme climatic events; the development of capacity to use those technologies, particularly by small farmers, and vulnerable groups such as women and youth; the development, processing and application of knowledge; and the development of mechanisms to increase access to that knowledge, particularly by small farmers, together with the strengthening of mechanisms, processes and actions to support the implementation of LDN.

106. The RAC/NAT is central in that effort. It was designed and operationalized under CSIDS-SOILCARE Phase 1 to promote and build climate smart and climate resilient agricultural systems in CSIDS, as well as to develop and test new adaptation technologies which can inform SSM, SLM and support the attainment of LDN in CSIDS. The RAC/NAT Facility will be strengthened under CSIDS-SOILCARE Phase 2 to become the premier institute to lead the research and development agenda on soils and land in the region, and to provide advice for science-based policy development that facilitates the mainstreaming of the latest developments in innovative agricultural technologies for LDN into the national and regional policy making process.

107. **For that, the project will support in the consolidation and expansion of the RAC/NAT role and scope in national and international research and science-policy spheres and to foster sustainability of project results (output 5.1.1). A 10-year strategic plan that defines the research and innovation ambitions and agenda of the Facility that considers the needs of CSIDS-SOILCARE Phase 2 and the future priorities for CSIDS will be developed (activity 5.1.1.1). The Facility's infrastructure to lead capacity development, research and innovation to fulfill the needs of the CSIDS-SOILCARE Phase 2 Project and to deliver its mandate in the Caribbean will be enhanced (activity 5.1.1.2) through, *inter alia,* the setup of a Geoinformatics Unit to lead the effective coordination, maintenance and functioning of the CARSIS and the DSS (under component 1), while providing technical backstopping to member states to optimized use of both systems for their planning and LDN reporting duties (in relation to activity 5.2.2.3), upgraded research facilities and augmentation of human resources.**

108. **Under CSIDS-SOILCARE Phase 2, the RAC/NAT will also design and carry out research and field testing (activity 5.1.1.3). Specific research on indigenous peoples' technologies for agriculture and natural resources management and their sustainability will be carried out, as means for incorporating ancestral legacy values within innovative agricultural systems, and as a lever of behavioral change, for the durability of outcomes. Collaboration and engagement with regional and global research institutions (activity 5.1.1.4) to investigate on topics and technologies relevant to the Caribbean, will be also part of the RAC/NAT scope, in the form of joint project bids to the main research funding schemes at the global level. This includes the management, maintenance and promotion of the use of the Caribbean Soil Library and Archive created under output 1.1.5, which will be explicitly included in the RACNAT strategic plan. Also, as part of this activity, the RAC/NAT will seek fluent communication and collaboration with the CARICOM's Council for Science and Technology.**

109. **Project resources will be used for the dissemination of the findings within the scientific community through papers in peer-reviewed topic journals and participations in international congresses and conferences on SSM and SLM (activity 5.1.1.5), and contribution to the design and hosting of a bi-annual Regional LDN/SSM/SLM Research Conference (activity 5.1.1.6) which provides a forum for Caribbean researchers, scientists, project managers, and the private sector to share research findings and best practices from the work under SOILCARE and other complementary initiatives across the region. The organization of this conference will be led by PISLM RAC/NAT Facility in collaboration with participating countries, regional institutions (e.g., Tropical Agricultural Research and Higher Education Center, Caribbean Agricultural and Research and Development Institute, Caribbean Agricultural Health and Food Safety Agency, Caribbean Community Climate Change Centre), tertiary institutions (e.g., University of the West Indies [UWI], University of Trinidad and Tobago, University of Belize and Guyana), and international technical cooperation agencies (e.g., FAO, UNEP and UNDP).**

110. **The RAC/NAT will also lead the preparation and publication of two (2) issues of the Caribbean Land and Soil Outlook (activity 5.1.1.7).**

111. **The PISLM RAC/NAT Facility will coordinate and contribute to the delivery of all the trainings and capacity development actions (output 5.1.2) planned under the project, so they are synergistically implemented and more impactful (activity 5.1.2.1), through the development and oversight of annual capacity development plans for components 1 to 4. The RAC/NAT will also support the design of a stable multilevel capacity development programme (activity 5.1.2.2) that offers training with modules and technical sessions targeted at a diversity of audiences, namely: primary and secondary schools, extension services and planning departments, grassroots organizations, academia, the private sector, youths, women, indigenous people, and policy makers. The design of the program will include, as appropriate, topics such as soil health and chemistry, soil sampling, SSM and SLM, development and use of drought-tolerant landraces, sustainable agriculture for LDN and resilience, climate smart agriculture and innovation, and LDN target setting and reporting, *inter alia*.**

112. **Resources will also be provided to implement a grant programme to fund students attending technical institutions that are pursuing courses in agriculture, forestry, and related areas (activity 5.1.2.3) through Continuing Professional Education programs offered at Caribbean universities and institutions such as the Guyana School of Agriculture, University of Trinidad and Tobago's Eastern Caribbean Institute of Agriculture and Forestry, and Mirabeau Agriculture School in Grenada, and others.**

113. **The results from CSIDS-SOILCARE Phase 2, including from the RAC/NAT Facility will be shared and available to the general public through the GEF funded SIDS-SIDS Green Blue Economy Knowledge Transfer Knowledge Hub (SIDS-SIDS KTH) spearheaded by the UWI-Cave Hill Campus, of which the SOILCARE Knowledge Hub established in CSIDS-SOILCARE Phase 1 will be a subsidiary node for SSM, SLM and LDN**

issues for CSIDS (output 5.1.3). Personnel from the PISLM Communication and Geoinformatics Units will participate in a working group with the SIDS-SIDS KTH (activity 5.1.3.1) to explore and foster synergies between the two digital platforms and work out the specific actions to be undertaken to facilitate integration. All the SSM and SLM best practices and lessons learned will be uploaded to the WOCAT database of SLM approaches and technologies, and links will be stablished for further collaboration, as part of the RAC/NAT outreach and strategy (under output 5.1.1). A communication plan will be designed and implemented through the duration of the project, with attention to creating awareness on soil health, benefits of SSM and SLM, land degradation issues, climate risks, and positive impacts of land stewardship on livelihoods, in addition to project activities and results (activity 5.1.3.2).

114. The interest among youths to pursue agriculture, soil science and related fields as future viable career options will be further supported through the PISLM Land Ambassadors programme (output 5.1.4)– a gender-sensitive regional secondary school world-of-work tours that will be designed in collaboration with Caribbean Examination Council's Agriculture Science Department (activity 5.1.4.1) and implemented (activity 5.1.4.2). The overall intent is to attract and increase enrolment in the fields of agriculture, forestry, and related areas, building a larger cohort of future specialists and entrepreneurs engaged in the development and transformation of the region's agriculture sector.

115. On the other hand, in recognizing that the long-term effectiveness of all measures and approaches on SSM/SLM for LDN will require strategic policy support on a continuous basis, component 5 seeks to further enshrine SSM & SLM into the regional policy frameworks (outcome 5.2). In first instance the Caribbean Soil Support Group (CSSG) for SSM/SLM will be expanded to include all CSIDS-SOILCARE Phase 2 countries (output 5.2.1). An initial activity will promote the official nomination of national Focal Points to the Global Soil Partnership from the six (6) countries joining the CSIDS-SOILCARE Phase 1n its Phase 2 (activity 5.2.1.1). Support will be provided to increased collaboration of the CSSG with the ASLAC and UNCCD focal points (activity 5.2.1.2), and to foster discussions and preparation of documents/policy briefs on regional scale soil-related topics (activity 5.2.1.3), thus acting as science-policy and advisory interface on subregional scale land management strategies and agronomic matters within regional fora. The CARICOM's Caribbean Council for Science and Technology will be engaged in discussions in this regard.

116. Another important aspect will be the development of a standardized procedure for LDN TSP 2.0 (output 5.2.2). After an assessment and gap analysis of existing LDN TSPs (activity 5.2.2.1) to determine their specificity, comprehensiveness, policy coherence, synergy with other MEAs, and gender responsiveness, a country-scale participatory process will be developed (activity 5.2.2.2) to draft and validate a regional Model for a LDN TSP 2.0 (activity 5.2.2.3) and related draft cabinet instruments (activity 5.2.2.4) that countries can use as a template to develop their improved own LDN TSP.

117. At the Regional Policy level, emphasis will be placed on the creation of the structures and the promotion of sub-regional strategies on integrated planning for drought and flood risk mitigation (output 5.2.3). To that end, the project parties and other regional-scale stakeholders, including private entities, will be engaged in sub-regional platforms/mechanisms for the coordinated management of drought and flood risk (activity 5.2.3.1). The activity of the mechanism will result in the identification of relevant sub-regional cooperation priorities, in particular related to land and water management for drought and flood mitigation, monitoring and forecasting capacities and resilience building, will be discussed, agreed and drafted as position papers (activity 5.2.3.2), to be submitted to the COTED.

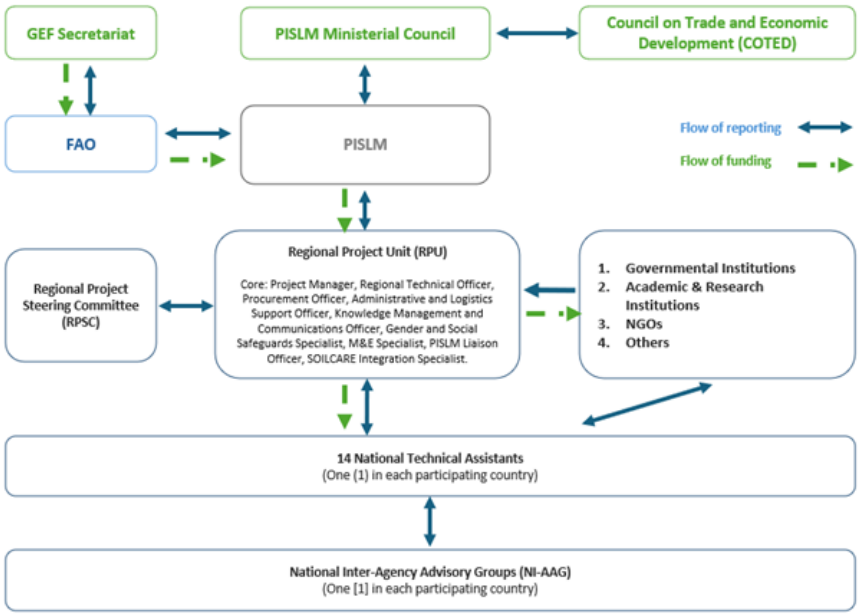
Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

B1. Institutional Arrangement and coordination with other initiatives and projects

135. The proposed project will build upon and strengthen the organizational structure set up under the SOILCARE Phase 1 program (GEFID 10195). The PISLM will act as the lead executing agency and will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions of the Operational Partnership Agreement (OPA) signed with FAO[1][36]. As Operational Partner (OP) of the project the PISLM is responsible and accountable to FAO for the timely implementation of the agreed project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for the intended purposes and in line with FAO and GEF policy requirements.

136. The project organization structure is as follows:



137. **Project Executing Agency - PISLM** will function as the Executing Agency of this project, as requested by the national governments in the Project Endorsement Letters. The PISLM is an IGO with a CARICOM mandate to guide its Member States with the implementation of SLM Projects under the UNCCD as well as the land management components of the various CSIDS instruments.[2][37]

138. The PISLM's role as executing agency shall be:

- Provide general oversight of CSIDS-SOILCARE Phase 2 and the National Project Offices in each of the participating countries to ensure the effective and efficient implementation of the project
- Oversee project execution in accordance with the project results framework and budget, the agreed work plan and reporting tasks
- Provide the necessary support to the national and regional entities involve in the project to ensure that the objectives of the project are met
- Signing of relevant legal Instrument to allow disbursement of funding

- Support the National Technical Assistants in discharging their respective responsibilities under the project in an effective and efficient manner
- Provide technical expertise through its personnel and networks.
- Ensure technical quality of products, outputs and deliverables, including reports to FAO
- Provide guidance and coordination to the co-executing agencies and national stakeholders and the National Technical Assistants in the participating countries
- Support logistical issues, e.g. through organization of meetings and provision of relevant facilities
- Addressing and rectifying any issues or inconsistencies raised by the Implementing Agency
- Mobilization of Regional Secretariats and Institutions in the implementation of project activities.
- Any other matter mandated by the PISLM Ministerial Council

139. **SOILCARE Regional Project Management Unit (RPMU).** To facilitate project execution and ensure partner engagement, the program will strengthen the RPMU created under CSIDS-SOILCARE Phase 1. GEF resources will be used to finance the following staff: a Project Manager; a Regional Technical Officer, Procurement Officer, Administrative and Logistic Support Officer, Knowledge Management and Communications Officer, Gender and Social Safeguards Specialist, M&E Specialist, PISLM Liaison Officer and Integration Specialist. The duration of these posts and the addition of new specialists will be approved by the Regional Project Steering Committee (RPSC).

140. **Country participation.** At the National Level, each of the participating countries will establish a SOILCARE Project Office within the Office of the UNCCD Focal Point and/or an Office identified by the participating country. This Office will be staffed by a National Technical Assistant financed with GEF resources. In addition, each country will appoint a National Focal Point for the project. The National Focal Point, will be an employee of the government and will (i) provide technical oversight for sector-specific activities; (ii) maintain effective two-way communication between the government and the project; (iii) facilitate alignment between project activities and the various institution's work plan; (iv) ensure integration with cross-sectoral policy and decision-making processes; and (v) support the mobilisation and tracking of co-financing commitments.

141. The proposed project will continue to support the National Inter-Agency Advisory Group (NI-AAG) currently established in each participating Phase 1 country. The project will help establish such a coordination mechanism in the new countries under Phase 2. The NI-AAG main function is to assist the National Focal Point in providing oversight of the activities being located nationally as well as coordination and cooperation with ongoing national and regional GEF and non-GEF financed projects/programs (such as government and/or other bilateral/multilateral supported initiatives in the project areas. The NI-AAGs will have execution oversight and monitoring duties, including more detailed result-based workplans at the national scale, and reporting obligations in front of the Regional Project Steering Committee. The NI-AAG will also promote that the results and approaches of the project are integrated in national-scale planning and policy-making processes. They will specifically include a senior representative from the public and private sectors responsible for business development and finance, from e.g. the Chambers of Commerce.

142. PISLM shall serve as Secretary of the **RPSC** which will be chaired by a National Focal Point from participating countries. The RPSC will be the main governing body of the project. The RPSC will approve Annual Work Plans and Budgets (AWP/B) on a yearly basis and will provide strategic guidance to the Project Management Team and to all executing partners.

143. The composition, responsibilities and rules of operation of the RPSC will be confirmed during its first meeting. Subject to the decision of this meeting, it is proposed that the RPSC will be responsible for approving the operational plans and annual reports of the project. The RPSC will provide overall guidance and strategic direction and oversight to project management and will approve all final outputs and deliverables of the project. Same than the NI-AAG, and to specifically promote integration of private sector at the regional scale, the RPSC will include a senior representative from the public and private sectors responsible for business development and finance. The RPSC will play a critical role in facilitating inter-ministerial coordination, project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It will ensure that required resources are committed and will arbitrate on any conflicts within the project or negotiate a solution to any problems with external bodies. Based on the approved Annual Work Plan, the RPSC will also consider and approve the quarterly plans and will also approve any essential deviations from the original plans

144. Specific functions of the RPSC will include:

- Review of Project Status Reports
- Endorsement of the final reports from project experts and consultants
- Approval of the Annual Project Workplan and budget respectively and any changes thereto, in accordance with GEF and FAO guidelines
- Annual review of project activities to assess project development

- Any other business brought before the RPSC by one of its members

145. **Implementing Agency:** The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency for the project, providing project cycle management and support services as established in the GEF Policy. As the GEF Implementing Agency, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the Implementing Agency role, FAO will utilize the GEF fees to deploy three (3) different actors within the organization to support the project:

The Budget Holder, which is usually the most decentralized FAO office, will provide oversight of day-to-day project execution

The Lead Technical Officer(s), drawn from across FAO will provide oversight/support to the projects technical work in coordination with government representatives participating in the Regional Project Steering Committee

- The Funding Liaison Officer(s) and the GEF Technical Officers (GTO) within FAO will monitor and support the project cycle to ensure that the project is being designed and carried out in accordance with FAO and GEF minimum fiduciary and technical standards.

146. FAO responsibilities, as GEF agency, will include:

Administrate funds from GEF in accordance with the rules and procedures of FAO

Oversee project implementation in accordance with the GEF rules, the project document, work plans, budgets, agreements with co-financiers and OPA(s)
Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned, when requested
Conduct at least one (1) supervision mission per year
Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress; and

- Financial reporting to the GEF Trustee.

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[1] *It should be noted that the identified Operational Partner(s) may change due to FAO internal due diligence and agreement procedures if not yet been concluded at the time of submission of the CEO Endorsement Request*

[2] The Barbados Programme of Action, the Mauritius Strategy for the Further Implementation of the Barbados Programme of Action and the SAMOA Pathway.

Will the GEF Agency play an execution role on this project?

No

If so, please describe that role here and the justification.

Not applicable

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

147. In terms of cooperation with on-going initiatives and projects including the potential for co-location and/or the sharing of expertise/staffing, SOILCARE 2, which will not only require the expansion of Phase 1 institutional structures but will require the introduction of new structures (e.g., the establishment and operationalization of the LDN TFM etc.).

148. Regarding Component 1, the CSIDS-SOILCARE project Phase 2 will build on the current initiative for data harmonization and sharing of the OECS, funded by the EU under the 11th European Development Fund (EDF) and implemented as part of its Component 9: The Empowerment of the OECS through Data of the OECS Regional Integration Through Growth Harmonisation and Technology (RIGHT) Programme. The fact that Antigua and Barbuda, the Commonwealth of Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines are OECS countries -- thus implementing the RIGHT program-- and parties of the SOILCARE Phase 2, brings the opportunity to approach the creation of a Caribbean-wide data-sharing policy in a phased manner, the first phase being the integration of the CARSIS with the data-sharing OECS system under development.

149. For the operationalization of the LDN-TFM under Component 4, the project will build upon the achievements of the work done in the countries that have established Trust funds under the Caribbean Biodiversity Funds, Caribbean Challenge Initiative, and its own Transformative Fund which structure and operations modalities are being worked on. Specifically, CSIDS-SOILCARE Phase 2 will pilot investments in SSM, value chain improvement and alternative livelihood initiatives with a specifically focus on youth and with gender perspective (Output 4.1.2) and design investment plans (Output 4.1.3). Lessons learned and experiences from approaches to capitalization, CSIDS-SOILCARE Phase 2 and other investments, would be discussed and analysed at regional forums to deduce a feasible approach for CSIDS. Collaboration with existing initiatives to channel private investment to sustainability efforts will be explored, such as the dedicated chapters of citizenship by investment programs in several countries.

150. Links will be also sought with the 2025 Youth Ecopreneur Programme of the International Trade Centre (ITC), it's Ye! Community and the G20 Global Land Initiative/UNCCD. The program is focused on youth entrepreneurs under the age of 35 who are founders, co-founders, or CEOs, and provides capacity building and seed funding.

151. Further, the existing trust funds addressing the “20 by 2025” Goal, to effectively conserve and manage at least 20% of the marine and coastal environment by 2020, provide fully functioning financial mechanisms that provide reliable funding to conserve and sustainably manage the marine and coastal resources and the environment over the long term. CSIDS-SOILCARE Phase 2's work will complement these activities in the terrestrial environment.

152. CSIDS-SOILCARE 2 will also build cooperative relations with the GEF funded project entitled “Demonstration of a Caribbean Mechanism Toward Establishment of a SIDS-SIDS KTH” – a work group has been established between the Executing Agency of the two (2) projects to facilitate this –, with the Basel Convention Regional Centre for Training and Technology Transfer for the Caribbean (BCRC-Caribbean), which is implementing the Caribbean Child Project (GEF ID: 10279), and with the Global Water Partnership-Caribbean (GWP-C), with MoUs signed between the two entities and PISLM Secretariat to collaborate on capacity building on sustainable soil and land management.

153. The CSIDS-SOILCARE Phase 2 will collaborate with the GEF Support to the 2026 UNCCD National Reporting Process – Umbrella program, which will support Parties to enhance their national-level institutions and technical capacities for effective and timely preparation and submission of the 2026 UNCCD national reports by equipping the UNCCD National Focal Points with technical capacity and tools to collect data and submit national reports through the Performance Review and Assessment of Implementation System (PRAIS) reporting tool. Collaboration will take the form of data, coordinated capacity development and software and decision support tools that can facilitate the reporting process.

154. Coordination of activities of the CSIDS-SOILCARE Phase 2 with current and foreseen national scale GEF investments of the LDFA, as well as within the BDFA and CCFA will be ensured (see list of projects in Annex H), and with non-GEF investments such as the FAO Technical Cooperation Projects., will be considered for implementation of components 2 and 3. The most relevant projects for each country are mentioned in Annex E, uploaded as separate document.

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

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)
28000	1788.6	0	0

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	28,000.00			

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)
	1,788.60		

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)

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)
70000	11692.9	0	0

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)

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

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)
70,000.00	11,692.90		

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 (Document(s) that justifies the HCVF)

Title

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_2e (direct)	0	569259	0	0
Expected metric tons of CO_2e (indirect)	0	681608	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)		569,259		
Expected metric tons of CO_2e (indirect)		681,608		
Anticipated start year of accounting		2026		
Duration of accounting		30		

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (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)

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

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)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,760	3,776		
Male	4,140	5,614		
Total	**6,900**	**9,390**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

Core indicator 3.2: A total of 1,788.6 ha of forests and forest lands will be restored, of which 599 ha will be direct effects resulting from on-the-ground actions of the project, while the rest are expected from planning activities under output 2.1.3. The figure for Core Indicator 3 at PIF was much higher (28,000 ha). The progress in implementation of the CSIDS-SOILCARE Phase 1 and, in particular its Mid-Term Review carried out in late 2024, have highlighted that such a big figure is not realistic, so a lower number is suggested that is adjusted to project budget, time frame and capacity of execution in the Caribbean context.

Core Indicator 4.3: 11,692.9 ha will be under improved practices in productive landscapes. From these, 3,953 ha correspond to demonstration sites where the project will have on-the-ground activities and the rest will result from the implementation of integrated land use plans as foreseen in outputs 2.1.3 and from outscaling the Small Farmers Drought Mitigation Scheme as per output 2.2.1 and 2.2.3. The figure for Core Indicator 3 at PIF was much higher (70,000 ha). The progress in implementation of the CSIDS-SOILCARE Phase 1 and, in particular its Mid-Term Review carried out in late 2024, have highlighted that such a big figure is not realistic, so a lower number is suggested that is adjusted to project budget, time frame and capacity of execution in the Caribbean context.

Core Indicator 6: the expected GHG emission reduction is 1,250,867 tCO2e in 20 years. From these 164,737 will have been reduced at project completion. Direct effects (sub-indicator 6.5) account for 569,259 tCO2e and indirect effects from outscaling (sub-indicator 6.6) will be up to 681,608.

Core Indicator 9: The PIF did not include any estimate of reduction on the use of agrochemical. However, because the project includes activities directly addressing that issue under component 2, it is considered that its implementation will result in a relevant reduction of the need for pesticides. Considering the 8,040 ha of agricultural lands on which component 2 will be implemented and a current rate of pesticide use of 18.14 kg/ha (figure from FAOSTAT for 2022, average for all Caribbean countries but Dominica), this makes a total of 145,845.6 kg of pesticides applied yearly in the project area, and around 2.92 tons (millions of Kg) in 20 years. From a conservative calculation based on a literature review, the use of agrochemicals can be reduced to at least half after implementation of SSM, which would mean a reduction/avoidance of 1.46 tons of chemicals of global concern at the end of the project capitalization period.

Core Indicator 11: 9,390 individuals will benefit from the project activities. At least 1,330 will be beneficiaries from component 2 (including implementation of SSM/SLM practices and participatory planning processes), 100 will be direct beneficiaries of the Small Farmers Drought Mitigation Scheme under component 3, component 4 will benefit 1,000 individuals through the actions of the TFM, YARDI and YABI, including capacity development and mentorship activities, and an estimated 6,000 individuals will be beneficiaries of trainings and capacity development activities under component 5 including government technical staff, extensionists and farmers through the Soil Doctors Programme, and other population sectors as students through e.g. scholarships and the Land Ambassadors Program. An overall 40% women (3,776 women) is targeted, which is considered a very ambitious target given the percentages of participation of women in agriculture in the different countries. It is expected that the percentage of women can be reached through actions specifically targeted at women (as per the GAP) and by involving the wider

population (rather than only producers). Core indicator 11 target is higher than estimated at PIF stage. This is due to the expanded capacity development actions, particularly under component 4.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	High	Average mean surface temperatures in the Caribbean region have increased by 0.5oC in the last century with higher values in the 1991-2020 period. In contrast, annual precipitation declined in the 20th century by 0.18mm yr-1 with reported 20% lower precipitation during period 1991-2020. Future climate trends indicate projected increase average minimum and maximum surface temperatures across the Caribbean with greater increase under the RCP8.5 scenario. Total annual precipitation is projected to decrease by 3% and 16% across the region under RCP 2.6 and RCP 8.5 respectively by 2071-2100. Increase intensity of extreme weather events are projected – i.e., Increase heavy rainfall events, number of hot days per year, and the mid-summer drought intensity index with adverse implications to food and nutrition security and farming livelihoods. Drought and heavy rainfall events generate difficulties in planning the agricultural calendar causing significant negative impacts on the effectiveness of agricultural practices and crop yields in the Caribbean with severe impact on crop production and livestock farming, generating direct and indirect income losses for smallholder producers. The frequency of categories 4 and 5 hurricanes is projected to increase by 25-30% with high likelihood of substantial damages and losses to forest, croplands, rangelands, soils and the agriculture sector generally. Sea surface temperatures are projected to increase by 1oC by mid-century with a projected 1m sea level rise by 2100, adversely impacting coastal forest ecosystems such as mangroves and farmlands. These risks are also likely to result in coastal and inland flooding, saltwater intrusion compounding challenges of water availability for food production. Food insecurity is likely to be exacerbated by climate change impacts on agriculture, through reduced crop and livestock productivity due to long dry spells, loss of coastal agricultural lands due to sea level rise and coastal erosion and destroyed agriculture infrastructure due to hurricanes. Mitigation Measure: - Incorporate climate resilience, early warning systems, and climate informed approaches into training curricula targeting agricultural extension, forest managers, policy makers, and farmers. - Support indigenous people by integrating different approaches for building climate resilience in field activities and promoting capacity development among the most vulnerable groups. - Build capacities of national and regional institutions on the use climate data to better understand climate change impacts and provide

		evidence-based planning and decision making. - Mainstream climate risk management through implementation of climate-resilient practices tailored to each targeted agricultural system under Component 2. - Build climate resilient value chains – integrate climate and market information into value chain activities to enhance decision making capacities and market access among local communities, women and youth. - Support long-term adaptation planning and investment technologies and infrastructure to climate-proof every step of the agrifood value chain. The project should ensure direct involvement of climate and agrometeorological experts, researchers and institutions, in the decision-making processes.
Environmental and Social	Moderate	The following are the major environmental and social risks, and the respective standards triggered in the checklist. See full Annex F-1 for further details. - Although it is unlikely that the project will develop an irrigation scheme in any one intervention site that is more than 20 ha due to the small-scale nature of producer operations, mitigation measures are elaborated (trigger 1.3). - Risks associated with restoration and management of forested areas (Trigger 3.4). - The project may introduce crops and varieties not previously grown for experimental purposes (trigger 3.1). - Possible risks associated with importation or transfer of seeds and/or planting material for cultivation, for research and development purposes (trigger 3.2.1 and 3.2.2). - Risks to cultural resources around intervention areas (trigger 9.4). - Risks to indigenous peoples living in the project area where activities will be implemented (trigger 9.1), and the use and sharing of Indigenous knowledge (trigger 9.4). - Risk of young people below the respective national employment age may be involved in project activities and being exploited in a few project countries (trigger 7.3). - Occupational health and safety (OHS) risks to workers in the agriculture sector (Triger 7.8). - Risks to subsistence producers and other vulnerable informal agricultural workers, characterized by high levels of “working poverty” in the agriculture sector and related value chains (Trigger 7.3). - Gender-based violence (GBV) and sexual exploitation, abuse and sexual harassment (SEAH) risks to vulnerable informal workers, with possible language barriers (trigger 7.5). - Risks associated with subcontracting. - Low risk that the project could increase GHG emissions associated with air and land-based travel of project staff, although not beyond those expected from increase production (trigger 1.13). Mitigation Measures - Implementation of water efficient drip irrigation systems coupled with other drought mitigation measures in demonstration sites, including rainwater harvesting systems. - Capacity building for farmers and extension staff on water conservation principles and proven practices for drought risk reduction. - Compliance to national forest policies and strategies and intentional action to maintain and/or improve the conservation of biodiversity during the design and implementation of all restoration activities. - All importations of seeds and planting material, if deemed necessary will comply with national and regional phytosanitary requirements, including of the Caribbean Plant Health Directors Forum and the International Plant Protection Convention. - Adherence to access and benefiting sharing and measures to limit introduction of invasive during restoration and other SLM practices. - Adopt measures to prevent displacement of local varieties, and/or crops from any such introductions of seeds/planting material. - Engage local communities

		to identify culturally sensitive resources and to monitor the project's impact. Implement the Chance Find Protocol to promptly report any identified tangible cultural resources during project implementation, for all such demonstration sites where indigenous peoples live. - Develop and implement standardised guidelines for land restoration which incorporate Indigenous knowledge and climate-resilient technologies. - The project will be culturally sensitive, respecting the rights, resources, traditional and governance structure of indigenous peoples, where applicable. - Implement the approved GAP and Stakeholder Engagement Plan (SEP) for the project. - Implement a monitoring mechanism to monitor the involvement of youth below the employment age in the respective countries. - Establish a gender-responsive research program at RAC/NAT Facility that includes Indigenous knowledge holders in the development and testing of climate-resilient agricultural technologies and practices. - Compliance with the national OHS policies, laws and regulation where available and the minimum practices for OHS for the specific work implemented, taking into consideration gender dimensions. - Prioritization of decent work and productive employment for local communities and farmers, including youths, women, and indigenous people to improve livelihoods. - Design and implement gender and age sensitive value chain analysis using the FAO Gender-Sensitive Value Chain Approach or other suitable methodology. - Implement comprehensive support services within the project as part of the GAP, including the gender-responsive Grievance Redress Mechanism and protocols for addressing GBV and SEAH complaints. Invest in translation services for native speakers to address language barriers, as needed.
Political and Governance	Moderate	National elections are likely during the project cycle and this can have implications for ministerial portfolios and therefore the home agency for the project. There are broader risks including the governance risk in the Haiti context due to high propensity for political instability. Mitigation measures are key. Mitigation: - Use the support of in county officials to seek guidance on navigating the political and governance landscape in all countries, in particular, high-risk countries. - Engage the political directorate and all relevant parties early and throughout the project cycle. - Inform the executing agency of any occurrences within countries that are likely to pose a risk/threat to project continuity and develop suitable mitigation plan. - Engage the ministries to integrate the project activities within their budgets as a means of limiting impact from potential cabinet reshuffling and other election implications
INNOVATION		
Institutional and Policy		SOILCARE Phase 1 has started a process to enhance institutional capacity at the country level to implement LDN projects. The proposed project will build on these efforts, including allocating resources to ensure countries have enough people available with adequate capacity to implement the project in a gender-sensitive manner. In terms of gender-sensitive actions, the gap may not always be a lack of institutional capacity but institutional resistance to the adoption and implementation of such measures. Mitigation measure: - Enhancing capacity to support the revision or development and implementation of gender-sensitive protocols to support activities in Phase 2.
Technological		The project does not have major components that would create potential issues

Financial and Business Model		The financial architecture of PISLM has been significantly upgraded to facilitate its new role as an IGO which has been vetted by FAO through their OPIM process.
EXECUTION		
Capacity	Moderate	Risk of insufficient capacity to implement the project in a timely and efficient manner. This can manifest in terms of limited human resources to dedicate to the project from beneficiary countries due to a reduction in the public service and staff rotations. Mitigation Measure: - Close collaboration with national focal points and National Inter-Agency Advisory Group (NI-AAG) to ensure strategic alliances with national partners to foster buy-in and ownership and maximize participation Limited technical expertise in soil science was specifically targeted under CSIDS-SOILCARE Phase 1 where 5 scholarships were awarded to the UWI for M.Sc and Ph. D. Under Phase 2 the approach is more comprehensive and strategic. Mitigation Measure: Expansion of the RAC/NAT to: • lead the design and coordination of an ambitious and cross-cutting capacity development programme, which will be monitored closely to ensure actions remain relevant and effective, consisting of training modules and technical sessions targeting a diversity of audiences, namely: primary and secondary schools, extension services and planning departments, grassroots organizations, academia, the private sector, youths, women, indigenous people, and policy makers. • include a vocation to become a stable program after the project ends, topics included are, inter alia, soil chemistry and soil health, soil survey and sampling, SSM and SLM, development and use of drought-tolerant landraces, sustainable agriculture and innovations in agriculture for LDN and resilience, and LDN target setting and reporting. Resources will also be provided for advanced training through Continuing Professional Education programs offered at Caribbean universities. In the context of gender this issue is multifield. This entails the limited exposure to gender and gender mainstreaming for actors within the sector and the limited frameworks for looking at the intersectionality of gender and land degradation issues. Mitigation Measure: - Timely mobilization of technical resources to support project implementation. - SOILCARE Phase 2 will take a proactive approach to address to ensure gender sensitive activities within land degradation. - From the GAP: Establish inclusive field operations protocols incorporating gender-balanced teams, safety measures, indigenous knowledge integration, flexible scheduling, and appropriate support services for diverse participant needs in soil sampling and analysis. - The analysis presented in the gender assessment provides insight into the nexus of gender and land degradation
Fiduciary	Low	The project will be executed by PISLM, an agency that is successfully implementing SOILCARE 1. PISLM was evaluated as a “low fiduciary risk agency” and has shown it has the capacity to deliver large projects, including financial management and procurement of goods and services. In its role as implementing agency, FAO will provide, as needed, guidance on financial management and procurement.
Stakeholder	Moderate	Participation of Indigenous Peoples in regional projects has been historically low. This project makes specific provision for activities to be undertaken in areas under the jurisdiction of indigenous peoples. Consequently, and

		following the approach established in SOILCARE Phase 1, indigenous peoples and their representatives will participate in the decision-making instructional structures (e.g. National Advisory Groups) designed for project implementation. A second source of risk is the resistance of farmers to adopt new tools and technologies designed to improve their livelihoods, foster SSM and SLM and drought resilience. The proposed project will work with key stakeholders to not only introduce these practices theoretically but will provide evidence-based knowledge on the performance and cost effectiveness of these measures, while also fostering engagement of farmers in field application and training to demonstrate their potential. Mitigation Measures: - The project may need to consider a limited knowledge, attitudes, practices and behaviour assessment to gauge potential resistance to these technologies in order to develop strategies to mitigate resistance. - Implementation of the approved GAP and SEP for the Project in collaboration with key stakeholders.

Other		

Overall Risk Rating	Moderate	The overall risk rating was determined using FAO's Framework for Environmental and Social Management (FESM). The checklist was completed to identify potential impacts and risks across environmental and social domains. Then, the answers were analyzed to categorize the risks based on the checklist's rating system, using a matrix that considers both the likelihood and severity of impacts. Finally, the individual risk ratings were synthesized to determine an overall E&S risk rating for the project. The Environmental and Social Management Plan has been uploaded in the portal.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

156. SOILCARE Phase 2 aligns with the Land Degradation Focal Area programming directions**.** Regarding ***Objective 1. Avoid and reduce land degradation through SLM,*** which promotes the wider application and scaling of SLM interventions to improve productivity and maintain or improve flow of agro-ecosystem services that underpin food production and livelihoods. The project promotes several strategies, including land restoration and measures to improve soil health - all of which aims to build sustainable and resilient land and soil capital. These measures are also integral to transforming and reorienting agricultural systems to support food security, considering climate trends, and the need to avoid GHG emissions and sequester carbon in agricultural land use systems.

157. SOILCARE Phase 2 is also aligned to ***Objective 3. Address desertification, land degradation, and drought issues,*** in particular, with a focus on the inter-linkages between land and water resources and drought risk reduction. This objective is largely achieved through the work under Component 3 and supported by complementary activities in other parts of the project. In this regard, emphasis is placed on building resilience to mitigate the effects of flood and droughts and to prevent the aggravating effects of land degradation, through comprehensive land-use planning. Enhancement of monitoring, forecasting and early warning mechanisms, building capacities for drought mitigation,

including the promotion of indigenous drought tolerant crops, development of Drought and Flood Smart Land Management Strategy and national drought policies and plans are all designed to strengthen the enabling environment for drought and flood mitigation.

158. The Project will help countries meet their objectives, responsibilities, and commitments under the UNCCD Convention, support attainment of targets under their respective LDN TSPs and other country commitments. A summary of the project contribution to meet the national LDN targets of the project parties is shown in the following table:

Country	Area (ha)	Degraded land (%)	TSP targets and PRAIS Voluntary targets	Country targets 2030 (ha)	Target comp 2 (ha) (CI 3 and 4)	Target comp 3 (ha) (CI 4)	Total project targets (ha)	Project contribution to country targets	Project % of degraded land
Antigua and Barbuda	45,394	9.0%	LDN is achieved by 2030. 5% improvement	431	24		24	5.6	0.59
Bahamas	1,193,018	24.1%	---	---	950	25	975	----	----
Barbados	43,466	20.2%	LDN is achieved by 2030. 10% increase in forest cover.	876	163		163	18.6	1.86
Dominica	75,355	31.6%	LDN is achieved by 2030 and an additional 20% improved	5,065	1,300	600	1,900	37.5	7.98
Grenada	31,955	7.2%	1900 ha	1,983	236	277	513	25.9	22.24
Guyana	21,264,957	27.7%	LDN is achieved by 2030. 2,000,000 ha for avoiding and 80,000 ha for reversing land degradation	2,080,000	806	1,500	2,306	0.1	0.04
Jamaica	1,099,957	11.4%	LDN is achieved by 2030. Additional 10% improved.	44,692	3,122		3,122	7.0	2.48
Saint Kitts and Nevis	26,332	23.4%	LDN is achieved by 2030. Additional 5% improved	308	111	133	244	79.1	3.95
Saint Vincent and the Grenadines	42,828	35.5%	LDN is achieved by 2030	---	310	800	1,110	----	----
Suriname	14,574,104	17.9%	LDN achieved by 2030. Additional 15% improved in Saramacca.	117,090	1,836		1,836	1.6	0.07

Saint Lucia	60,504	3.6%	LDN is achieved by 2030. Additional 15% improved	631	800		800	126.8	37.25
Trinidad and Tobago	516,446	58.0%	LDN is achieved by 2030. 100 ha of quarry lands. 100 ha of degraded forest. 500 ha of SOC improved	700	174	315	489	69.9	0.16
TOTAL	38,974,317				9831	3650	13482		

Belize and Haiti are not included in this table because there will not be on-the-ground activities in those countries.
Total country areas are given as per the FAO Global Administrative Unit Layers (GAUL) 2024. The country areas and the designations used in this table do not imply the expression of any opinion whatsoever concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.
The total degraded areas in this table reflect the figures in the national Target Setting Process reports excepting for Bahamas, Dominica, Grenada, Guyana and Saint Vincent and the Grenadines, for which data were calculated through multisource degradation estimations for the purposes of this project using: https://projectgeffao.users.earthengine.app/view/dss-soilcare.
A soft reference of 25% of country targets was used as decision rule to set the project targets in small islands. For bigger countries (Guyana, Suriname, Jamaica) decision on targets was made considering the maximum in-house execution capacity, including synergies with other projects with similar objectives and approaches.
For countries for which the available data in PRAIS reports were not reliable (e.g. degradation in baseline is higher than in the reporting period), the column on country targets reflects the voluntary targets only. In those cases, the 25% reference could not be used for project target setting and the intervention acreages were decided after an in-country *ad hoc* assessments. This explains the large percentual contributions of the project to the national LDN targets the case of Saint Lucia and Saint Kitts and Nevis. No data on land degradation and targets was available for Bahamas and Saint Vincet and the Grenadines.

159. The project's focus to review the current LDN TSPs with the view of developing a regional model for the LDN TSP 2.0 will ensure harmonized target setting and reporting processes, increasing policy coherence while ensuring that critical thematic areas (e.g., climate change and gender) are integrated. Data and information generated under Component 1 will be very important in that endeavour, and to comply with reporting obligations also under the UNFCCC and UNCDB. Components 2 and 3 will support, in addition to advances regarding LDN, the progress to achieve nationally determined contributions (NDCs), to implement national action plans (NAPs) and national drought plans (NDPs).

160. In particular regarding the NDCs, activities that relate to soil recarbonization, sustainable forestry, forest restoration, reduced use of fertilizers, improved livestock and grazing management are all included in the project and contribute towards the NDC, specifically regarding the AFOLU sector, as shown in the table below:

Country	Direct mid term	Direct completion	Direct 20 years	Indirect mid term	Indirect completion	Indirect 20 years
Barbados	829.59	909.82	-129.08	9798.36	10745.90	-1524.60
Grenada	-424.58	-1213.62	-8803.37	-1021.90	-3013.07	-22661.77
Jamaica	-1642.71	-7283.64	-72538.53	-2097.44	-12180.01	-136042.21
Guyana	-8922.74	-29695.19	-252054.47	-2890.64	-7226.60	-43359.62
Antigua and Barbuda	-4.60	-11.49	-68.93	-21.37	-53.43	-320.60
St Kitts and Nevis	-130.45	-362.78	-2543.38	-363.70	-1092.57	-8388.76
St Vincent and the	-1127.15	-2891.21	-18080.58	-2415.30	-6221.59	-39162.85
St Lucia	-320.60	-801.50	-4809.02	-534.34	-1335.84	-8015.04
Dominica	-5589.47	-13973.66	-83841.98	-14702.30	-36755.76	-220534.55
The Bahamas	-3296.08	-8240.21	-49441.27	-5082.50	-12706.25	-76237.52
Trinidad and Tobago	-2050.85	-5127.13	-30762.78	-3165.69	-7914.24	-47485.42
Suriname	-2531.47	-6842.01	-46185.37	-4213.90	-11451.41	-77875.13
Total	-25211.10	-75532.63	-569258.76	-26710.72	-89204.87	-681608.06

The table shows the expected reduction of greenhouse gases, in tons of CO2e, from the project on-the-ground activities (direct) and from outscaling mechanisms (indirect) at project mid-term, at project completion (5 years later) and 15 years after project end.

161. Through forest restoration, sustainable soil management and enhanced agrobiodiversity, CSIDS-SOILCARE Phase 2 will also contribute to the following Global Biodiversity Framework (GBF) targets:

- Restoration of degraded ecosystems, with benefits for biodiversity as well as for the provision of ecosystem services to food systems (GBF Target 2).
- Improved management practices along the length of the value chain (such as low external input agriculture and pollution- free processing) to reduce pollution risks and the negative impact of pollution (GBF Target 7).
- Increased application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, so that target areas (including those under agriculture, pastures and forestry) are managed sustainably (GBF Target 10).
- Application of nature-based solutions and ecosystem-based approaches that restore, maintain and enhance nature's contributions to people, including ecosystem functions and services (GBF Target 11).

162. The expansion of the CSSG to include all CSIDS-SOILCARE Phase 2 countries enhances the bargaining power for soil health at the policy level, while also fostering stronger collaboration with ASLAC and UNCCD focal points. In addition, the work of the other entities such as CARSOLAN will continue to seek consensus at the regional policy level to integrate the LDN Framework and related SSM and SLM principes and practices in relevant policy and normative mechanisms, while support actions at the farm level.

163. SOILCARE Phase 2 is also directly aligned with key regional development instruments, including the Revised OECS Principles for Environmental Sustainability (SGD2040), the Draft Caribbean Community Environmental and Natural Resources Policy Framework, the OECS Growth and Development strategy, and the OECS Green Blue Economy Strategy and Action Plan. Other important synergies will be fostered with a number of macroeconomic and sectoral national instruments within participating states as articulated in Annex E.

Alignment to FAO Strategic framework, SDGs and Country Programming Framework

164. The CSIDS-SOILCARE Phase 2 initiative aligns closely with the FAO Strategic Framework and the UNMSDCF for the Caribbean by promoting sustainable agricultural practices and enhancing resilience in CSIDS. Specifically, it addresses PPA BE1 by implementing climate-smart agricultural practices that support sustainable food systems, directly contributing to SDG target 2.4. The project aims to improve land and soil quality while increasing productivity, which is essential for adapting to climate change impacts, including extreme events such as droughts. Additionally, the initiative targets SDG 15.3, focusing on LDN through the restoration and sustainable management of ecosystems, reinforcing PPA BE3 on biodiversity and ecosystem services. By enhancing adaptive capacity, the project aligns with Outcome 5 of the UNMSDCF, emphasizing gender-responsive disaster risk management and climate adaptation.

165. FAO's ability to support all participating CARICOM countries aligns with the project's objectives, particularly the need for reliable soil information and the achievement of LDN targets. As the UN's technical agency for food and agriculture, FAO can leverage its expertise in agricultural productivity and environmental sustainability to support the building of resilience among vulnerable populations. FAO has the necessary prerequisites for this support through the ongoing implementation of SOILCARE Phase 1 in conjunction with the leadership of the Global Soil Partnership to advance SSM both globally and regionally. The project relies on the countries NDCs, NAPs and NDPs to ensure facilitation of the countries in meeting their obligations under the UNCCD Convention.

Lessons learned from past projects

166. The proposed project builds on valuable lessons from previous initiatives in the Caribbean and the wider region. Key insights have been drawn in first instance from the CSIDS-SOILCARE Phase 1, which has been the first experience of a regional approach to LDN in the Caribbean, and specifically from the findings and recommendations of its Mid-Term-Review (MTR).

167. As the CSIDS-SOILCARE Phase 1 has been the first project of its kind in the Caribbean region – a large regional scale soil and land project implemented in 8 countries and with actions at the local, national and regional level – learnings from its implementation have been numerous. The formulation process in CSIDS-SOILCARE Phase 2 has benefitted from them in different forms. First, regarding the identification of barriers and their scope at the multiple implementation scales. An example of that is the understanding of the practical obstacles for producing and using soil data at a subregional scale. Since not all countries had in-house capacity to produce their own data, data production for producing soil maps under Phase 1 required importing samples to Trinidad and Tobago for laboratory analysis. In the absence of a regional sample import procedure, the different national regulations and policies regarding soil sample imports in the Caribbean countries emerged as an added difficulty to overcome the lack of data. CSIDS-SOILCARE Phase 2 design has those obstacles into account and includes resources for addressing them with a long-run view, to not only streamline data production under the project but also pave the way for future developmental and research endeavours that require soil sample import (output 1.1.1).

168. A second learning from that process was that, given the decentralized nature of the project, centralizing all analytical activities into 1 single laboratory was operationally slow, and that has been also included in the CSIDS-SOILCARE Phase 2 design by supporting a regional reference laboratory that will support the development of analytical capabilities in the laboratories of the region in the short and longer term, in addition to the upgrading of equipment and materials under the project. CARSOLAN and RAC/NAT are expected to have a major role in that, for which both entities will be greatly strengthened under CSIDS-SOILCARE Phase 2 (outputs 1.1.1 and 5.1.1). Learnings regarding how to overcome data-sharing concerns, which have limited the ambition of the project to make data publicly available, have also been considered, and will be addressed by the project under its component 1.

169. Further, a crucial lesson from Phase 1 was the need to take precautions to not be over ambitious regarding on-the-ground implementation targets. On-site activities are the most onerous for the project, both in terms of their economic cost and their complexity for implementation, given the diversity of tasks, the larger number of national regulations and stakeholders and the need for intensive monitoring and management. In that regard, several risk mitigation measures have been taken in Phase 2 project formulation, to ensure that targets are realistically designed in relation to the capacity to implement.

170. First, the targets have been set after a thorough examination of national LDN-TSP and PRAIS reports. As a reference for decision making, the acreage to be acted upon by the project was set to be not higher than 25% of the country's voluntary targets. For bigger countries (Guyana, Jamaica, Suriname), the reference figure was 2,000 ha, although final acreages can be higher through scaling out plans in cases in which specific existing projects and programs

allow wider strategies. In fact, both the specific locations and the scaled-out acreages were defined in considering also the expected scope of other initiatives (GEF or non GEF, including national programs), for best value for money and increased impact, while minimizing the management workload. Still, given the complexity of a 14-countries project, measures have been included to support the strengthening of the Project Management Unit structure and human resources.

171. In that regard, CSIDS-SOILCARE Phase 2 will count with fully dedicated in-country staff with the necessary technical expertise to follow up on project activities. At the regional level, the technical capacities of the project personnel will be also greatly improved, with funds allocated to recruit experts in the main areas of activity of the project. Activities requiring a specific background or technical expertise that will not be available among the project core staff will be executed as contracts by specialized entities. In addition, the large global FAO technical capacity will be made available to support to the implementation of the project, as per the OPIM rules.

172. Further, the design of activities, the results framework and the workplan of CSIDS-SOILCARE Phase 2 embed measures to ensure that issues potentially producing implementation delays are identified and addressed the soonest, including a schedule of milestones and deliverables. It is thus expected that participatory processes and planning of field operations will be faster in CSIDS-SOILCARE Phase 2 compared to phase 1, also considering that, from the work of Phase 1, processes and communication channels are now streamlined.

173. The need for stronger and more active National Project Committees (NI-AAGs) is also a lesson learned from the implementation of Phase 1. The Ni-AAGs had up to now limited activity under CSIDS-SOILCARE phase 1. Under Phase 2, Ni-AAGs will be revitalized and have execution and monitoring duties, including more detailed result-based workplans at the national scale, and reporting obligations in front of the Regional Project Steering Committee.

174. Regarding policy-related activities, support to decision-making and policy formulation at the subregional level has produced notable advances under Phase 1. The approach to these aspects under Phase 2 will follow a similar strategy based on communication, collaboration and consensus of the parties. In Phase 2, an increased technical support to policy making is foreseen through the RAC/NAT Facility and the Caribbean Soil Support Group (outputs 5.1.1 and 5.2.1), that are expected to act as science-policy interface with regional entities and enable data-driven policy formulation.

175. The project will take onboard lessons learned from the work done in the countries that have established Trust funds under the Caribbean Biodiversity Funds, Caribbean Challenge Initiative, and its own Transformative Fund which structure and operations modalities are being worked on. Specifically, CSIDS-SOILCARE Phase 2 will consider their experience from approaches to capitalization, and CSIDS-SOILCARE Phase 2 and other investments, would be discussed and analysed at regional forums to strategize on an approach for CSIDS that is sustainable. Further, the CSIDS-SOILCARE Phase 2 learns from the work being done in the countries under the “20 by 20” Goal, to effectively conserve and manage at least 20% of the marine and coastal environment by 2020. The existing trust funds provide fully functioning financial mechanisms that provide reliable funding to conserve and sustainably manage the marine and coastal resources and the environment over the long term. CSIDS-SOILCARE Phase 2 work will learn and synergize with these activities in the terrestrial environment for increased impact.

176. Several key lessons have emerged from other initiatives (see Annex H for projects table) across the Caribbean. Many projects demonstrated the importance of integrated approaches—combining soil restoration, water management, biodiversity conservation, and climate-smart agriculture to build resilience. Successful initiatives emphasized inclusive planning, particularly the engagement of women, youth, and Indigenous communities, which strengthened local ownership and sustainability. The use of updated soil data, digital mapping, and decision-support systems proved critical for evidence-based planning and targeted interventions. Projects that invested in capacity building, such as training farmers, upgrading laboratories, and supporting institutional frameworks, were more effective in scaling sustainable practices.

177. Additionally, public-private partnerships and transformative financing mechanisms helped mobilize resources and improve market access for smallholders, and synergies will be sought with such initiatives (e.g. Jamaica PPPs, which have been successful in developing regenerative agriculture through the Jamaica Agribusiness Agency (agro-forestry with breadfruit), and through the Kee Farms network ; and the GEF-funded project “Strengthening the Resilience of Agricultural Lands and Forests in Dominica in the aftermath of Hurricane Maria”).

178. Finally, aligning national efforts with regional strategies and policy frameworks enhanced coherence and impact, showing that multi-country collaboration can accelerate progress toward climate resilience and LDN.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

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

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

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

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

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

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement**.**

Yes

Select what role civil society will play in the Project

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

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

Executor or co-executor;

Other (Please explain) Yes

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in section B project description?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

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

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

179. The proposed project is designed to offer significant socioeconomic benefits at the national and local levels, especially for farmers, both men and women, young people, indigenous peoples, and communities in close proximity to intervention intervention areas.

180. Upgrade of the National Soil Reference Labs to test soil is likely to play a pivotal role in improving farmers knowledge of the fertility status of their soil, and the capacity of extension services to provide advice for augmenting soil health and overall plot performance. Concomitantly, implementation of the restoration and improved practice measures in degraded sites is predicted to build baseline land and soil capital, enhancing the capability of the resource to provide ecosystem services, including food production. Increased access to drought tolerant crop varieties and risk reduction measures reduces the likelihood of adverse impacts on farming livelihoods, during adverse climatic conditions. These activities are linked to improved land productivity and resilience, increased crop yields, with associated increase household income from more secure livelihoods in the medium to long term. The expansion of the scope and influence of the RAC NAT Facility in leading the soil and land agenda for CSIDS will provide increased employment opportunities for existing professionals and recent Caribbean graduates. This addresses a fundamental need in the region regarding the low to moderate uptake of professionals with higher education certification in the job market.

3. One of the most profound media for delivering socioeconomic benefits is via the investment opportunities under Component 4. The strategic focus on value chain improvements and alternative livelihoods will provide tangible positive impacts at the local level, particularly in rural areas where land degradation and climate change presented significant challenges to livelihoods and agricultural productivity. Moreover, upscaling profitable and high performing enterprises creates employment opportunities and generate income for local communities, including young people. Additionally, the promotion of SSM and SLM practices will enhance the resilience of agricultural systems, ensuring economic stability of rural livelihoods and food security for the people of the region. Building the entrepreneurship capacities throughout the 14 SOILCARE Countries, including in rural areas and indigenous communities will contribute in a meaningful way to reducing the high unemployment and poverty rates and addressing the unskilled labour force among Caribbean youths.[1][38]

4. Through capacity building activities and the sharing of best practices, the project will further empower local communities to engage in sustainable land and soil health, with positive implications for livelihoods and wellbeing. Moreover, due to the intentional focus on inclusive participatory approaches, the project will ensure that the benefits of sustainable land management are equitably distributed among all stakeholders, promoting social cohesion and economic development in rural areas.

The project also promotes full and productive employment and decent work in rural areas. A balance between farm and non-farm activities is promoted, consistent with the project's investment in higher value economic activities through improvement of existing value chains. In addition, there is a distinct commitment to focus on women and youths, who are key catalyst for rural development although according to the International Labour Organization their potential remains "*under-appreciated, under-developed, and under-used*."[2][39] Moreover, the project consistent with LDN principle 13 *on application of participatory process,* provides a "voice" to rural stakeholders and their associations to participate in the planning and monitoring of all project activities, including those with economic returns.

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[1] World Bank. (2023). Opportunities for Latin American and Caribbean youth facing the unemployment conundrum. https://blogs.worldbank.org/en/latinamerica/opportunities-latin-america-caribbean-youth-unemployment.

[2] ILO. (2011). Rural development through decent work.

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
FAO	GET	Antigua and Barbuda	Land Degradation	LD STAR Allocation: LD-1	Grant	335,616.00	30,205.00	365,821.00
FAO	GET	Bahamas	Land Degradation	LD STAR Allocation: LD-1	Grant	1,342,464.00	120,821.00	1,463,285.00
FAO	GET	Barbados	Land Degradation	LD STAR Allocation: LD-1	Grant	1,006,847.00	90,616.00	1,097,463.00
FAO	GET	Belize	Land Degradation	LD STAR Allocation: LD-1	Grant	82,308.00	7,407.00	89,715.00
FAO	GET	Dominica	Land Degradation	LD STAR Allocation: LD-1	Grant	1,342,464.00	120,821.00	1,463,285.00
FAO	GET	Grenada	Land Degradation	LD STAR Allocation: LD-1	Grant	1,006,849.00	90,616.00	1,097,465.00
FAO	GET	Guyana	Land Degradation	LD STAR Allocation: LD-1	Grant	1,006,847.00	90,616.00	1,097,463.00
FAO	GET	Haiti	Land Degradation	LD STAR Allocation: LD-1	Grant	401,690.00	36,152.00	437,842.00
FAO	GET	Jamaica	Land Degradation	LD STAR Allocation: LD-1	Grant	1,006,848.00	90,617.00	1,097,465.00
FAO	GET	St. Kitts and Nevis	Land Degradation	LD STAR Allocation: LD-1	Grant	1,342,465.00	120,822.00	1,463,287.00
FAO	GET	St. Lucia	Land Degradation	LD STAR Allocation: LD-1	Grant	1,006,848.00	90,617.00	1,097,465.00
FAO	GET	St. Vincent and Grenadines	Land Degradation	LD STAR Allocation: LD-1	Grant	1,006,848.00	90,617.00	1,097,465.00
FAO	GET	Suriname	Land Degradation	LD STAR Allocation: LD-1	Grant	671,233.00	60,411.00	731,644.00
FAO	GET	Trinidad and Tobago	Land Degradation	LD STAR Allocation: LD-1	Grant	1,005,967.00	90,538.00	1,096,505.00
FAO	GET	Antigua and Barbuda	Land Degradation	LD STAR Allocation: LD-3	Grant	115,088.00	10,358.00	125,446.00
FAO	GET	Bahamas	Land Degradation	LD STAR Allocation: LD-3	Grant	460,349.00	41,431.00	501,780.00

FAO	GET	Barbados	Land Degradation	LD STAR Allocation: LD-3	Grant	345,262.00	31,073.00	376,335.00
FAO	GET	Belize	Land Degradation	LD STAR Allocation: LD-3	Grant	28,225.00	2,540.00	30,765.00
FAO	GET	Dominica	Land Degradation	LD STAR Allocation: LD-3	Grant	460,349.00	41,431.00	501,780.00
FAO	GET	Grenada	Land Degradation	LD STAR Allocation: LD-3	Grant	345,262.00	31,073.00	376,335.00
FAO	GET	Guyana	Land Degradation	LD STAR Allocation: LD-3	Grant	345,262.00	31,073.00	376,335.00
FAO	GET	Haiti	Land Degradation	LD STAR Allocation: LD-3	Grant	137,744.00	12,396.00	150,140.00
FAO	GET	Jamaica	Land Degradation	LD STAR Allocation: LD-3	Grant	345,261.00	31,072.00	376,333.00
FAO	GET	St. Kitts and Nevis	Land Degradation	LD STAR Allocation: LD-3	Grant	460,348.00	41,430.00	501,778.00
FAO	GET	St. Lucia	Land Degradation	LD STAR Allocation: LD-3	Grant	345,261.00	31,072.00	376,333.00
FAO	GET	St. Vincent and Grenadines	Land Degradation	LD STAR Allocation: LD-3	Grant	345,261.00	31,072.00	376,333.00
FAO	GET	Suriname	Land Degradation	LD STAR Allocation: LD-3	Grant	230,174.00	20,715.00	250,889.00
FAO	GET	Trinidad and Tobago	Land Degradation	LD STAR Allocation: LD-3	Grant	344,959.00	31,045.00	376,004.00
FAO	GET	Regional	Land Degradation	LD Global/Regional Set-Aside	Grant	1,094,000.00	98,460.00	1,192,460.00
Total GEF Resources ($)						**17,968,099.00**	**1,617,117.00**	**19,585,216.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested?

true

PPG Amount ($)

299995

PPG Agency Fee ($)

26990

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)
FAO	GET	Antigua and Barbuda	Land Degradation	LD STAR Allocation: LD-1	8,012.00	721.00	8,733.00
FAO	GET	Bahamas	Land Degradation	LD STAR Allocation: LD-1	32,051.00	2,884.00	34,935.00
FAO	GET	Barbados	Land Degradation	LD STAR Allocation: LD-1	24,039.00	2,163.00	26,202.00
FAO	GET	Dominica	Land Degradation	LD STAR Allocation: LD-1	32,051.00	2,884.00	34,935.00
FAO	GET	Grenada	Land Degradation	LD STAR Allocation: LD-1	24,038.00	2,162.00	26,200.00
FAO	GET	Guyana	Land Degradation	LD STAR Allocation: LD-1	24,039.00	2,163.00	26,202.00
FAO	GET	Haiti	Land Degradation	LD STAR Allocation: LD-1	9,590.00	863.00	10,453.00
FAO	GET	Jamaica	Land Degradation	LD STAR Allocation: LD-1	24,039.00	2,163.00	26,202.00
FAO	GET	St. Kitts and Nevis	Land Degradation	LD STAR Allocation: LD-1	32,051.00	2,884.00	34,935.00
FAO	GET	St. Lucia	Land Degradation	LD STAR Allocation: LD-1	24,039.00	2,163.00	26,202.00
FAO	GET	St. Vincent and Grenadines	Land Degradation	LD STAR Allocation: LD-1	24,039.00	2,163.00	26,202.00
FAO	GET	Suriname	Land Degradation	LD STAR Allocation: LD-1	16,025.00	1,442.00	17,467.00
FAO	GET	Trinidad and Tobago	Land Degradation	LD STAR Allocation: LD-1	24,017.00	2,161.00	26,178.00
FAO	GET	Belize	Land Degradation	LD STAR Allocation: LD-1	1,965.00	174.00	2,139.00
Total PPG Amount ($)					**299,995.00**	**26,990.00**	**326,985.00**

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
FAO	GET	Antigua and Barbuda	Land Degradation	LD STAR Allocation	500,000.00
FAO	GET	Bahamas	Land Degradation	LD STAR Allocation	1,808,400.00
FAO	GET	Barbados	Land Degradation	LD STAR Allocation	1,500,000.00
FAO	GET	Dominica	Land Degradation	LD STAR Allocation	2,000,000.00
FAO	GET	Grenada	Land Degradation	LD STAR Allocation	800,000.00
FAO	GET	Guyana	Land Degradation	LD STAR Allocation	1,500,000.00
FAO	GET	Haiti	Biodiversity	BD STAR Allocation	598,435.00
FAO	GET	Jamaica	Land Degradation	LD STAR Allocation	1,500,000.00
FAO	GET	St. Kitts and Nevis	Land Degradation	LD STAR Allocation	2,000,000.00
FAO	GET	St. Lucia	Land Degradation	LD STAR Allocation	1,500,000.00
FAO	GET	St. Vincent and Grenadines	Land Degradation	LD STAR Allocation	1,500,000.00
FAO	GET	Suriname	Land Degradation	LD STAR Allocation	1,000,000.00
FAO	GET	Trinidad and Tobago	Land Degradation	LD STAR Allocation	1,498,687.00
FAO	GET	Bahamas	Biodiversity	BD STAR Allocation	191,600.00
FAO	GET	Belize	Land Degradation	LD STAR Allocation	40,873.00
FAO	GET	Belize	Biodiversity	BD STAR Allocation	40,874.00
FAO	GET	Belize	Climate Change	CC STAR Allocation	40,872.00
FAO	GET	Grenada	Biodiversity	BD STAR Allocation	700,000.00
Total GEF Resources					**18,719,741.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
LD-1	GET	13,659,294.00	19495520
LD-3	GET	4,308,805.00	6156480
Total Project Cost		**17,968,099.00**	**25,652,000.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Health and the Environment, Antigua and Barbuda	In-kind	Recurrent expenditures	838000
Recipient Country Government	Ministry of Environment and National Beautification, Green and Blue Economy, Barbados	In-kind	Recurrent expenditures	2032000
Recipient Country Government	Ministry of Environment, Rural Modernisation, Kalinago Upliftment and Constituency Empowerment, Dominica	In-kind	Recurrent expenditures	2332000
Recipient Country Government	Guyana Lands and Surveys Commission	In-kind	Recurrent expenditures	2042000
Recipient Country Government	Ministry of the Environment, Haiti	In-kind	Recurrent expenditures	682000
Recipient Country Government	Ministry of Environment, Climate Action and Constituency Empowerment, Saint Kitts and Nevis	In-kind	Recurrent expenditures	2382000
Recipient Country Government	Ministry of Agriculture, Fisheries, Food Security and Rural Development, Saint Lucia	In-kind	Recurrent expenditures	1982000
Recipient Country Government	Ministry of Spatial Planning and Environment, Suriname	In-kind	Recurrent expenditures	2362000
Recipient Country Government	Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour, Saint Vincent and the Grenadines	In-kind	Recurrent expenditures	2332000
Recipient Country Government	Ministry of Planning and Development, Trinidad and Tobago	In-kind	Recurrent expenditures	331000
GEF Agency	FAO	In-kind	Recurrent expenditures	1236000
Recipient Country Government	Ministry of Environment and Natural Resources, The Bahamas	In-kind	Recurrent expenditures	2387000
Recipient Country Government	Ministry of National Resources, Petroleum and Mining, Belize	In-kind	Recurrent expenditures	300000
Recipient Country Government	Ministry of Mobilisation, Implementation and Transformation, Grenada	In-kind	Recurrent expenditures	2082000
Recipient Country Government	Ministry of Agriculture, Land and Fisheries, Trinidad and Tobago	In-kind	Recurrent expenditures	2332000
Total Co-financing				**25,652,000.00**

Please describe the investment mobilized portion of the co-financing

The figures quoted in the table above were identified by the co-financers, via letters of co-financing, as actual estimates of the amount of co-financing that will be contributed to the SOILCARE Phase 2 project from various country-related projects/activities to be conducted during the implementation phase of SOILCARE Phase 2. The in-kind contributions of the co-financing will be through the following:

- The Ministry of National Resources, Petroleum and Mining, Belize and Ministry of Planning and Development, Trinidad and Tobago:

o Salaries of government personnel involved in the project

o Office facility and services including office equipment, space/meeting rooms and communication (telephone, e-mail, internet)

o Transportation and logistics for field/site visits.

- The Ministry of Health and the Environment, Antigua and Barbuda, Ministry of Environment and Natural Resources, The Bahamas, Ministry of Environment and National Beautification, Green and Blue Economy, Barbados, Ministry of Environment, Rural Modernisation, Kalinago Upliftment and Constituency Empowerment, Dominica, Ministry of Mobilisation, Implementation and Transformation, Grenada, Guyana Lands and Surveys Commission, Ministry of the Environment, Haiti, Ministry of Environment, Climate Action and Constituency Empowerment, Saint Kitts and Nevis, Ministry of Agriculture, Fisheries, Food Security and Rural Development, Saint Lucia, Ministry of Spatial Planning and Environment, Suriname, Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour, Saint Vincent and the Grenadines and Ministry of Agriculture, Land and Fisheries, Trinidad and Tobago:

o Salaries of government personnel involved in the project

o Office facility and services including office equipment, space/meeting rooms and communication (telephone, e-mail, internet)

o Transportation and logistics for field/site visits

o Programme of work (2026-2031).

- FAO:

o TCP/BAR/4001: Enhancing agricultural production through more precise and efficient digital crop management systems (2024—2026)

o TCP/DMI/4001: Improving livelihoods through diversified high-value vegetables crop production in selected agroclimatic zones (2024—2026)

o TCP/STK/4001: Strengthening Protected Agriculture to Improve People's Livelihoods, Food and Nutritious security (2024—2026)

o TCP/STL/4001: Climate Smart Agriculture and Integrated Crop Management to boost vegetable production in St. Lucia (2024—2026)

o FVC/SLC/215/MUL: Digital Solutions to Improve Horticultural Crop Management in the Caribbean (2024-2025).

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
Project Coordinator	6/20/2025	Neila BobbPrescott		neila.bobbprescott@fao.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Diann Blacl-Layne	Director	Antigua and Barbuda - Department of Environment	11/15/2025
Rhianna m. Neely-Murphy	Director	The Bahamas - Department of Environmental Planning and Protection	12/11/2023
Yolande J. Howard	Permanent Secretary	Barbados - MINISTRY OF ENVIRONMENT AND NATIONAL BEAUTIFICATION, GREEN AND BLUE ECONOMY	11/15/2023
Kenrick W. Williams	Chief Executive Officer	Belize - Ministry of Sustainable development, climate change & disaster risk management	11/17/2023
Kimisha Thomas	Senior Policy Advisor	Dominica - Ministry of Environment, Rural Modernisation, Kalinago Upliftment and Constituency Empowerment	10/30/2023
Nicole Clarke	Permanent Secretary	Grenada - Ministry of mobilisation, implementation and transformation	12/5/2023
Kemraj Parsram	Executive Director	Guyana - Environmental Protection Agency	11/7/2023
Astrel Joseph	Director General	Haiti - Ministry Of Environment	11/6/2023
Samanthia Justin	Chief Technical Officer	St Lucia - Department of Sustainable Development	11/14/2023
Gillian Guthrie	Permanent Secretary	Jamaica - Ministry of Economic Growth and job creation	11/28/2023
Nerissa Williams	Permanent Secretary	SKN - Ministry of Environment, climate action, and constituency empowerment	11/23/2023
Janeel Miller - Findlay	Director, Sustainable Development Unit	St. Vincent and Grenadines - Ministry of Tourism, Civil Aviation, Sustainable Development and Culture	11/13/2023
Vanuessa Gefferie	Permanent Secretary for General and Financial Affairs	Suriname - Ministry of Spatial Planning and Environment	11/15/2023

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Project Objective and indicators targets: To improve livelihoods, increase climate resilience of food systems and effectively restore and manage lands in the Caribbean by applying principles of sustainable soil and land management.							
Component 1: Updating soil information and data as the basis for strengthened decision making on LDN and resilience to climate change impacts							
Outcome 1.1: Caribbean countries have improved capacity to monitor and report on LDN, including the use of soil data to make informed decisions and contribute to regional and global soil and climate knowledge systems.	CI11: number of beneficiaries (from trainings on soil labs, DSM, fieldwork, Land cover and productivity mapping and DSS; CARSOLAN Steering Committee capacity development and library users) (number of women)	Training on laboratory SOPs, DSM, fieldwork and DSS was provided to national staff from the Phase 1 countries and the SOILCARE 1.	68 beneficiaries (trainings on labs and fieldwork) (34 women)	200 beneficiaries (mid-term + DSM mapping land cover/productivity and DSS; CARSOLAN SC, library users) (100 women)	Workshop reports Training participant lists Library access logs	Countries not included in SOILCARE I will share soil data from national soil sampling exercise in CARSIS and utilize the DSS to support decision making and reporting.	Geoinformatics Unit/Hub in the RAC/NAT and RPU
	Number of countries using national SOC data and the DSS for land use planning and reporting.	Eight (8) countries previously included in SOILCARE I are using national soil data and the DSS for land use planning and reporting.	10 have integrated their data including on SOC into CARSIS and are using the DSS to LDN reporting.	Fourteen (14) SOILCARE II countries have integrated data including on SOC into CARSIS and are using the DSS to LDN reporting.	The country PRAIS reports are based on evaluation and calculations from the DSS that consider the data in the CARSIS.		
	Number of National Soil labs implementing standardized QA/QC measures compliant to Global Soil Laboratory Network standards.	All National Soil Labs have in place specific QA/QC measures compliant to varying standards. However, there is no harmonized/standardized approach used, which hinders the comparability of the results.	QA/QC measures adopted by national labs	CARSOLAN and Regional Reference Laboratory verified QA/QC implementation in 14 country labs.	Reports of QA/QC measures implemented Reports of Regional Reference Laboratory/CARSOLAN visits to labs for evaluation		
	Number of regional (CARICOM, OECS) policies/decisions that have considered CARSIS information	0	1	3	Documentation on policy and decision documents elaboration. Meeting minutes		
Output.1.1.1 Infrastructure and technical skills assessed and upgraded for	Number of National Soil Labs upgraded and strengthened to a Tier 2 level with increased capacity for testing and analysis, compliant to Global Soil Laboratory	Through SOILCARE Phase I, eight National Soil Labs were upgraded to analyze soil parameters to a Tier 1 level. A few countries such as	Soil laboratories in the six (6) new participating are upgraded to Tier 1 level compliant to Global Soil Laboratory Network standards.	14 SOILCARE Phase II National Soil Labs are assessed and upgraded with trained staff and specialized equipment to implement SOPs for Tier 2 analysis in alignment with	Tier 1 and 2 capacity assessment report for six (6) countries. Tier 2 capacity assessment report for wight (8) countries.	Recipient countries have the infrastructure to place the equipment Laboratory	RAC/NAT Facility, (or partnering regional university), and participating soil labs.

laboratories under CARSOLAN. -	Network Standards.	Trinidad and Tobago have some capability for Tier 2 testing, however, strengthening is required.	Report on the analytic capability, equipment, and infrastructure needs for Tier 2 is available for at least 40% of soil labs.	accordance with GLOSOLAN standards.	Validated specifications for Tier 1 and 2 laboratory equipment. Call for tenders.	equipment for Tier 1 and 2	
	Number of laboratories participating in regional Proficiency Testing exercises for Tier 1 indicators.	There has been no interlaboratory or reginal proficiency test in the Caribbean to date, which hinders the comparability and the appraisal of data accuracy.	At least 14 labs (1 per country) participate in regional PT.	CARSOLAN and Regional Reference Lab verified QA/QC in country labs from and proposed corrective measurements in case of low proficiency.	QC/QA SOPs created and adopted nationally for all 14 countries. Minutes of CARSOLAN meetings. Results of proficiency testing.	All 14 participating countries agree on the selection of a single Regional Reference Laboratory	Regional Reference Laboratory and RAC/NAT Facility
Output.1.1.2 National maps of soil properties produced for Phase 2 new countries	Number of SOILCARE countries with digital maps of soil properties (including SOC and SOC sequestration potential) from national data.	Through the work carried out in PHASE I, eight (8) Caribbean SIDS have updated national digital soil maps, that include SOC and SOC sequestration.	Two (2) new Phase 2 countries have digital soil maps on 10 soil properties (including SOC and SOC sequestration).	Six (6) new Phase 2 countries have digital soil maps on 10 soil properties (including SOC and SOC sequestration).	Repository of legacy data for the Phase 2 new countries. Records of survey design meetings. Dataset, map and report of validated design Field reports Soil properties datasets Records of map validation meetings	Legacy data is available and accessible for Phase 2 new countries	Geoinformatics Unit/Hub in the RAC/NAT Facility, Digital Soil mapping Specialist, and competent authorities in each country.
Output 1.1.3 Phase 2 new countries integrated within Regional and Global Soil Information Systems.	Number of Caribbean SIDS integrated into the CARSIS.	Data from national soil sampling for seven (7) Caribbean SIDS from Phase I are available and integrated into CARSIS.	Soil and related datasets from 2 Phase 2new countries integrated within CARSIS.	Data from six (6) Phase 2 new countries integrated into CARSIS	Request of data in approved format issued and data received from countries Minutes of meetings for data quality verification Country login credentials and access logs	Phase 2 new countries agree to have national data incorporated	GIS officers in country and Geoinformatics Unit/Hub at the RAC/NAT Facility.
	Number of countries that agree on a draft enabling policy framework for data sharing	No data sharing policy exists at the subregional level	Six (6) OECS countries agree on a draft data sharing policy	10 countries agree on a draft data sharing policy, and it is submitted to COTED	Meeting minutes Draft policy document	Countries see benefits in sharing data at	RAC NAT Facility, PISLM Secretariat, and

					Submission documents	the regional scale	participating countries.
Output 1.1.4 LDN DSS incorporating soil information expanded to Phase 2 new countries	Number of countries that have updated and ground-truthed land cover and productivity maps	Countries are using global data and models to assess and report on LDN sub-indicators (land cover) 1 and 2 (productivity)	Eight (8) countries have updated land cover and productivity estimations from national data	14 countries have updated national land cover and productivity ground-truthed data	Maps on land cover and productivity included in the DSS	In-country experts willing and available to participate	RAC NAT Facility, Geoinformatics Unit/Hub, and participating countries.
	Number of countries reporting on LDN indicators using updated national data on SOC in the PRAIS report.	Seven (7) countries are able to report in PRAIS 5 using national SOC data	All 14 countries had training on data processing and PRAIS reporting based on national data. 10 countries reporting using national/regional data in PRAIS 5	14 countries reporting using national data in PRAIS 6	Training reports Minutes of PRAIS report validation consultations/workshops		
Output 1.1.5 Caribbean soil archive and data library established.	Number of soil samples archived, and their data included in library	Under SOILCARE I at least 1,800 samples were collected and are stored at UWI. No actual soil archive and data library or soil spectral library within CSIDS.	Library design validated. Protocol for library access and use drafted. Dedicated physical space with suitable conditions available for housing the soil archive. The samples of the eight (8) countries of Phase 1 and two (2) of Phase 2 countries measured using soil spectroscopy	Soil archive hosts all the samples from SOILCARE phase 1 and 2 Library populated and operational, including data (also spectroscopic) from all the SOILCARE Phase 1 and 2 samples.	Minutes of validation consultations/workshops on design of protocol for access and use Documentation of agreements/contracts on the physical space allocated to the soil archive Spectroscopy datasets	Infrastructure exists with available space for the archive Countries agree to contribute national samples and data Caribbean and other institutions are interested in using the samples/data	RAC NAT Facility – SSM/Soil Research and Lab Consultant with support from country officials
	Number of external authorized users accessing library data (% of women)	0	20 (40% women)	At least 50 authorized users from national and international stakeholders, research entities and academia (40% women)	Library access logs		
Component 2: Rehabilitation of degraded lands prioritized through national land degradation neutrality target setting process (LDN-TSP) to achieve land degradation neutrality (LDN).							
Outcome 2.1 Land degradation avoided, reduced	C13: ha of rangelands and forests restored (forests)	At least 10,000 ha of degraded lands is targeted for restoration under Phase I.	At the end of year 2, restoration plans implemented in approximately 600 ha of degraded lands across participating states.	Approximately 1,780 ha of degraded lands restored across participating states (600 ha through direct actions and 1,190 ha through the	Site assessments reports of degraded forest, cropland or rangelands Intervention plans for degraded	Beneficiary countries will not change land uses in demonstr	RAC/NAT Facility - LDN/SLM Consultant, Ministries of Agricultur

and reversed through implementation of selected SSM and SLM strategies.				implementation of plans).	forest, cropland or rangelands Productivity calculations from satellite images	ation sites during project execution	e, Environment and Planning, and other competent authorities in country.
	CI4: ha of landscapes under improved practices (rangelands and forests including areas covered by plans)	At least 10,000 ha of degraded lands targeted for improved practices under Phase I.	At the end of year 2, improved land management implemented in approximately 2,820 ha of landscape	Approximately 8,040 ha of landscape under improved land management practices (2,820 ha through direct actions and 5,220 ha through the implementation of plans).			
	CI6: 983,391 tCO2e of reduced emissions (20 years: CI 6.5: 386,979 tCO2e; CI6.6: 596,412 tCO2e)	0	49,717 tCO2e (25,211 tCO2e from direct effects and 30,931 tCO2e from indirect effects)	139,728 tCO2e (53,723 tCO2e from direct effects and 86,006 tCO2e from indirect effects)			
	CI9: 1.45 tons of pesticides reduced/avoided (20 years)		76,732 kg of pesticides reduced/avoided	0,73 tons of pesticides reduced/avoided			
	Increase in productivity (remote sensing, Normalized Difference Vegetation Index) in demonstrations sites	Countries have done an assessment of land productivity for their PRAIS reports	5% increase in Normalized Difference Vegetation Index in demonstrations sites	10% increase in Normalized Difference Vegetation Index			
	CI11: number of direct beneficiaries from interventions, plans and trainings including the farmers under the Soil Doctors Programme (40% women and 25% youth)	The Soil Doctors Programme has been launched in four (4) countries, with trainings of trainers implemented in Antigua and Barbuda (18 trainers), Belize (15), Saint Lucia (22) and Trinidad and Tobago (25). Field implementation phase has not started. Phase 1 countries national staff have received training on the	750 beneficiaries from field implementation of the Soil Doctors in Antigua and Barbuda, Belize, Saint Lucia, and Trinidad and Tobago and from training of trainer's session in four (4) additional countries, and from SSM Protocol trainings of staff from 4 countries (300 women, 188 youth)	1330 beneficiaries (1260 from the Soil Doctors from 14 countries and 70 extension officers and technical staff trained on the SSM Protocol) (532 women, 333 youth)	Country Soil Doctors implementation plan. Field visits records Photos and videos Records and participants lists from trainings.	Farmers see benefits in learning on soils and soil management and are willing to participate. Soil-health is a priority in country extension services	

		implementation of the SSM Protocol					
Output 2.1.1 SSM and SLM best practices implemented in forest and rangeland demonstration sites.	Number of SSM and SLM best practices implemented in forest and rangeland demonstration sites	SSM and SLM best practices have been implemented in forests and rangelands in Phase I countries	Number of SSM and SLM best practices selected through participatory processes and implemented in forest and rangeland demonstration sites in all beneficiary countries	Number of SSM and SLM best practices provided evidence of improved soil health in demonstration sites in all beneficiary countries	Evaluation report and suite of SSM and SLM best practices selected for all demonstration sites. Reports of meetings and stakeholder consultation workshops	Beneficiary countries will not change land use during project execution	RAC/NAT Facility - LDN/SLM Consultant, Ministries of Agriculture, Environment and Planning, and other competent authorities in country.
	Number of propagation centres strengthened or established	SOILCARE Phase 1 has improved eight (8) propagation centres in seven (7) countries. The six (6) countries joining Phase 2 have not enough supply capacity for the project targets	Procurement process for upgrading six (6) propagation centres (one per Phase 2 country) completed and centres supplying project operations	Six (6) Plant propagation centres have upgrading plans to supply cover project outscaling needs	Field and laboratory reports of the baseline, yearly and end assessments of the FAO SSM protocol Propagation centres design documents and procurement plans		
	% SOC increase in demonstration sites (SSM Protocol)	There is a significant SOC gap in the demonstration areas	Baseline SOC and soil biodiversity collected for all the demonstration sites using the SSM Protocol by early year 2 and two (2) yearly visual soil assessment (metric for biodiversity to be chosen on a site-specific basis)	5% SOC increase in all the demonstration sites	Cost benefit analysis report assessing the efficacy of the implemented technologies and best practices.		
	Soil biodiversity increased in demonstration sites (SSM Protocol)	Soil biodiversity is suboptimal in demonstration sites		Improved soil biodiversity is demonstrated using the SSM protocol (target *tbd* depending on metric)			
Output 2.1.2 SSM strategies to optimize agricultural inputs (fertilizers and pesticides) implemented and monitored in cropland	Reduction in frequency and quantity of fertilizers and pesticides	Productivity in croplands is generally maintained through extensive use of fertilizers and pesticides, one of the reasons being low SOC Soil biodiversity is low in demonstration croplands.	Baseline data on fertilizers, pesticides, productivity. Best options of ISFM and recycled and reused fertilizer sources identified and implemented at the end of year 1 Best strategies to IPM identified and implemented at the end of year 1	20 % average reduction in chemical inputs	Assessment report of suitable local options for Integrated Soil Fertility Management and Integrated Pest Management including traditional and indigenous knowledge. Report of selected measures for	Farmers are willing to adopt proposed practices and approaches	RAC/NAT Facility Land Consultant, RAC NAT Facility - LDN/SLM Consultant, Ministries of Agriculture, Environment and Planning,

demonstration sites. -		Under SOILCARE 1, the RAC/NAT has completed a trial of use of biostimulants and hormones for hot pepper production that will inform the strategies for agrochemical reduction under Phase 2. Baseline data on agriculture chemicals use conducted in the Barbados and the OECS			recycling farm waste into usable soil amendments.		and other competent authorities in country.
	% increase in soil productivity (SSM Protocol)		Baseline data on productivity for all the demonstration sites	15% average increase in productivity	Results of baseline, yearly and end assessments of the SSM Protocol		
	% SOC increase in demonstration sites (SSM Protocol)		Baseline SOC data collected for all the demonstration	5% SOC increase			
	Soil biodiversity increased in demonstration sites (SSM Protocol; metric for biodiversity to be chosen on a site-specific basis)		Baseline soil biodiversity data collected for all the demonstration sites	tbd dependent on site-specific metric			
Output 2.1.3 Participatory gender-inclusive, and context-specific strategic land management plans produced for the implementation areas and integrated into national DSS.	Number of gender-inclusive, and context-specific participatory and strategic land management plans for the implementation areas	EnGenDER: gender inequality, climate change & disaster risk resilience country briefs available for Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, St. Vincent and the Grenadines and Suriname	40% of implementation areas have gender-inclusive, and context-specific strategic SLM plans	All implementation areas have gender-inclusive, and context-specific strategic SLM plans	Proposal on updated land use plans for the implementation areas in the 14 SOILCARE countries Gender analysis report detailing the effect of gender relations on social and economic structures in the context of land use planning, proposing recommendations to address gender inequalities and proposing recommendations for plans to meet the needs of both men and women for St. Kitts and Nevis, Suriname, Dominica, The Bahamas, Trinidad and Tobago, St. Vincent and the Grenadines, Grenada, Guyana, Antigua & Barbuda, St. Lucia, Jamaica, and Barbados	Stakeholders are willing and available to participate in land use planning	RAC/NAT Facility - LDN/SLM Consultant, Ministries of Agriculture, Environment and Planning, and other competent authorities in country.
Component 3: Strengthening CSIDS capability to combat flooding and drought through soil, land, and water management for LDN.							
Outcome 3.1 Caribbean countries have increased	CI4: hectares under improved management	Under SOILCARE Phase 1 10,000 Ha were subject to actions towards improved	Approximately 1,130 ha (demonstration sites)	2,520 ha (outscaled target)	Site assessments reports of degraded forest, cropland or rangelands	Stakeholders are willing and available to participate	RAC/NAT Facility in collaboration with its strategic partners (e.g., CARDI &

capacity for drought and flood risk mitigation based on evidence-based sustainable land/soil management and drought-smart land and water management.		climate resilience			Intervention plans.		Tropical Agricultural Research an Higher Education Center), and Ministries of Agriculture, Environment and Planning, and other competent authorities in country.
	CI6: 265,822 tCO2e of reduced emissions (20 years: CI 6.5: 182,151 tCO2e CI6.6: 83,671 tCO2e)	0	12,833 tCO2e (7,254 tCO2e from direct effects and 5,578 tCO2e from indirect effects)	36,665 tCO2e (22,720 tCO2e from direct effects and 13,945 tCO2e from indirect effects)			
	CI11: number of direct beneficiaries from interventions, plans and trainings including the Soil Doctors Programme (40% women and 25% youth)	The Soil Doctors Programme has been launched in 4 countries, with trainings of trainers implemented in Antigua and Barbuda (18 trainers), Belize (15), Saint Lucia (22) and Trinidad and Tobago (25). Field implementation phase has not started. Extension officers have not specific training on agrometeorology or climate risk	300 beneficiaries (250 from the Soil Doctors Programme in six (6) countries, 50 producers in the Small Farmers Drought Mitigation Scheme) (100 women, 50 youth)	At least 860 beneficiaries (600 from Soil Doctors,160 from trainings to extensionists, 100 producers in the Small Farmers Drought Mitigation Scheme) (344 women, 215 youth)	Country Soil Doctors implementation plan. Field visits records Photos and videos Records and participants lists from trainings.	Farmers see benefits in learning on soils and soil management and are willing to participate. Soil-health is a priority in country extensions services	
Output 3.1.1. Program to enhance monitoring, forecasting and risk assessment capacities of the CDPMN implemented	Number of participating member states with local or country specific drought severity index maps (e.g., Standardized Precipitation Index and Standardized Precipitation Evapotranspiration Index) and/or drought outlooks	Currently 2 Phase II countries are taking steps to prepare local Standardized Precipitation Index/Standardized Precipitation Evapotranspiration Index or drought severity maps.	Local officials trained in agrometeorology and with the capacity to developed related drought severity maps and outlooks.	At least 7 countries have prepared local Standardized Precipitation Index/Standardized Precipitation Evapotranspiration Index or drought severity maps. Data and forecasting outlooks shared quarterly with local farmers within intervention	Copies of maps or outlooks.	Local officers trained and willing and interested to apply knowledge to support development of country specific drought forecasting maps/outlooks.	RAC/NAT Facility, CIMH, and Competent authorities in country,
Output 3.1.2 SSM, SSM and drought-smart land and	Number of meetings with stakeholders (including at least 30% women) for the selection and assessment of	0	Two (2) meetings per country	At least three (3) meetings per country	Records of meetings and consultation workshops	Stakeholders are willing and available to	

water management implemented and monitored in demonstration sites as part of the Small Farmers Drought Mitigation Scheme	SSM and SLWM-based mitigation options					participate	
	Increase in soil infiltration and water holding capacity	Soil hydrological regulation capacities are low because of reduced organic matter content and inadequate structure	Baseline data and yearly assessments using the SSM Protocol	10% increase in soil infiltration and water holding capacity	SSM Protocol datasets and reports		
Output 3.1.3 Watershed scale plans to replicate and scale out Small Farmers Drought Mitigation Scheme drought-smart options produced	% of women participating in planning processes (by country)	0	15%	30%	Records of meetings and consultations Validated plans		
	Number of ready-to-use and gender-sensitive *techpacks*	0	3	10	Documents on environment specific combinations of technical options with guidelines for implementation		
Output 3.1.4 National-scale integrated planning approaches for drought and flood risk mitigation developed and adopted.	Number of countries with national cross-sectoral gender responsive multistakeholder mechanisms for drought and flood risk reduction	National Drought Plans have been developed for two (2) countries - Grenada and Guyana, although these needs to be reviewed and updated. No known flood risk mitigation plans or cross-sectoral mechanisms available.	6	14	Vulnerability Assessments reports for beneficiary countries, including gender specific risk	Stakeholders are willing and available to participate	RAC/NAT Facility, CIMH, and Competent authorities in country,
	Number of countries with gender responsive drought and/flood risk mitigation plans.		At least four (4) beneficiary countries have draft national drought plans inclusive of risk mitigation measures with gender considerations	Six (6) beneficiary countries have drafted national drought plans inclusive of gender considerations and risk mitigation measures and presented them for cabinet approval	Consultation reports to agree on roles and responsibilities Cabinet submission documents		
Component 4: Enhancing food systems and Alternative Livelihoods supported by transformative financial systems that involve the private sector.							
Outcome 4.1 SSM and SLM based business strategies are scaled out through accessible financing and improved market access for	% of target LDN TFM work program allocated yearly	0 bankable investments implemented. Little interest from the youth for existing agribusiness value chains	50%	100%	LDN TFM annual reports	Investments available for SLM and SSM for CSIDS	LDN TFM in collaboration with PISLM Secretariat
	CI11: number of beneficiaries from investments from LDN TFM, YARDI and YABI (40% women)		At least 400 (160 women)	At least 1,000 (400 women)	Training reports. TFM annual reports		

LDN and climate resilience							
Output 4.1.1: LDN TFM capitalized and operational	Funds mobilized and allocated to the LDN TFM.	No funds have yet been allocated to the LDN TFM. Initial capitalization of the LDN TFM will come from project budget (USD 107,143 per country)	** USD TBD after baseline assessment is done	TBD after baseline assessment is done	TFM annual reports	Investment returns and donations are available for capitalization	PISLM Secretariat in collaboration with the FAO.
	Number of bankable projects or investments funded by the LDN TFM and implemented	10 bankable projects are targeted to be designed in SOILCARE Phase I.	One (1) project funded by the LDN TFM and rolled out or commenced execution.	Three (3) projects funded and rolled out or commenced execution.	Project concepts TFM annual reports	Stakeholders are interested	PMU, Business Consultant
Output 4.1.2 YARDI based on SLM and SSM implemented in rural communities of Trinidad and Tobago and Guyana	Number of capacity development actions for at-risk youths implemented	No regional initiatives exist in at-risk communities to encourage youth engagement in SLM and SSM	Situational analysis report and implementation plan drafted detailing synergies with existing initiatives by end of year 2.	At least two (2) 1-year initiatives per country implemented/augmented	Stakeholder identification and analysis report for Trinidad and Guyana Capacity assessment reports for cohorts Evaluation reports	Youth are willing and available to participate	
	% of women benefitting from YARDI	Women engagement in agribusiness in the Caribbean is low due to structural barriers like limited access to land, credit, and decision-making power, compounded by a heavy burden of unpaid domestic work		At least 30% of beneficiaries are women	Records and reports of actions	Young females are willing and available to participate. Project support is sufficient for enabling increased women participation	
Output 4.1.3 YABI towards CARICOM 25x25 vision implemented	% of agri-business projects designed by young women submitted to YABI	No regional initiatives exist to encourage youth and specifically women engagement in SLM and SSM	10% of submitted projects are led by women	30% of submitted projects are led by women	Calls for proposals promoted across the seven [7] Caribbean SIDS with specific mention to women participation. Proposals submitted to YABI funding. Structure in place for the review and approval of proposals	CARICOM Secretariat is interested in partnering with PISLM in designing and implementing this initiative and youths in participating countries	Agriculture Extension Officers in the two countries. In country managers and extension staff, and Investment and Finance Specialist in SLM &SSM
	Number of agri-business projects funded by YABI and implemented		Six (6) projects selected for funding and implemented	11 projects selected, funded and implemented			

	Number of initiatives funded that remain active the first year of operation (% of female led initiatives)		At least 2 projects (1 female led)	At least 5 projects (2 female-led)	including selection criteria. Grant award announcements issued. Business plans. Training reports.	are willing and interested in designing and implementing bankable projects aligned to the 25x25 initiative. Project support is sufficient for enabling increased women participation.	
Component 5: Enhancing scientific and technical capacities, strengthening knowledge management, and mainstreaming SSM/SLM in policy, in support of LDN.							
Outcome 5.1 Enhanced scientific, technical and knowledge-transfer capacity at the national and regional scales for SSM and SLM-based innovations in agriculture	Number of recorded visits to SOILCARE Knowledge Hub	SOILCARE Knowledge Hub was established under Phase I and currently hosts technical reports (Driving Forces-Pressures-State-Impacts-Responses, validation reports, intervention plans), training reports, videos from field implementation and training, webinar recording, and other materials from Phase 1, as well as policy documents such as LDN TSP of project parties	25% increase in recorded visits to SOILCARE Knowledge Hub	50% increase in recorded visits to SOILCARE Knowledge Hub	Reports on website traffic for SOILCARE Knowledge Hub	Technicians are willing to write reports for review and dissemination	PISLM Secretariat, RAC/NAT Facility, PMU, Knowledge Management and Communication Officer
	Number of research partnerships/agreements by RAC/NAT	0	3 (regional universities)	6 (regional universities and international institutions)	Signed agreements with work programs.		

	CI11: Number of direct beneficiaries of capacity development program (% of women) (inclusive of beneficiaries of students grant program, land ambassadors, research conferences, specific comm and dissemination actions; excluding those benefitting of trainings coordinated here but executed under other components)	Some capacities for SSM, SLM, LDN, drought and flood smart mitigation and related needs exists among target groups in all 14 countries, however, capacity gaps exist. Capacity development opportunities are comparatively less accessible for women than for men.	At 2,760 beneficiaries (40% of end of project target reached) (1,104 women)	6,000 beneficiaries trained or impacted by students grant program, land ambassadors, research conferences, specific comm and dissemination actions (2,400 women)	Capacity development plan report Workshop Reports Pre and post evaluation reports Lesson learned logs	Stakeholders are willing and available to participate in organized training and capacity development initiatives under SOILCARE Phase II.	RAC NAT Facility - Capacity Building/Training Consultant, National Consultant Soil Doctors, Indigenous Peoples Specialist in collaboration with consultants and partners
Output 5.1.1 Program implemented to consolidate and expand RAC/NAT role and scope in national and international research and science-policy spheres and to foster sustainability of project results.	RAC/NAT Strategic Plan adopted	The research role of the Facility is highlighted in PISLM's Business Plan as one of two (2) main competitive advantages of the Inter-governmental Organization. Albeit this, the PISLM RAC/NAT Facility lacks a long-term vision and plan to guide its research and innovation agenda.	By the end of year 1, a research agenda for project-related activities, with timelines, assessment of outscaling potential, planned actions to promote outscaling and related funding opportunities produced and validated.	A 10-year strategic plan for the RAC/NAT drafted and adopted, that includes: objectives, priority research lines and agenda, human resource and infrastructure needs, financial plan considering public and private funding and investments, organizational structure, targets of performance, knowledge transfer and outreach measures, and strategic partnerships.	Meeting minutes Validated Strategic Plan document	Countries are willing and able to participate in the development of RAC/NAT Facility	PISLM RAC/NAT Facility, PISLM Secretariat, Consultant and PMU
	Number of SOILCARE Phase 2-related research and field-testing activities executed.	Under SOILCARE Phase I, the Facility undertook trials on hot pepper production using biostimulants.	At least four (4) additional projects implemented, as per the RACNAT research agenda and the SOILCARE Phase 2 workplan.	At least four (4) research projects providing draft or final results	Research reports		RAC/NAT Facility in collaboration with its partners.
	Number of soil and land technical/scientific projects and products at the regional and global scale that make use of the SOILCARE sample archive and/or data library	0	At least one (1)	At least three (3)	Final products acknowledging samples and data contributions, correspondence, library access logs		
	Number of technical documents/protocols/procedures produced by RAC/NAT	Two (2) Caribbean Land and Soil Outlooks were produced during implementation of Phase I.	One (1) Reference Lab QA/QC document (with CARSOLAN) One (1) Standardized regional laboratory QA/QC protocol (with CARSOLAN)	Mid-term target +: One (1) technical guideline on soil survey One (1) technical guideline on reducing agrochemicals	Call for articles disseminated for Caribbean Land and Soil Outlook. Published/approved documents		

			On e(1) issue of Caribbean Land and Soil Outlook published	One (1) technical guideline on drought mitigation One (1) technical guideline on biofertilizers One (1) report on Caribbean traditional and indigenous agricultural systems/practices At least one (1) contribution to science-policy documents (with CSSG) One (1) issue of Caribbean Land and Soil Outlook published			
	Number of scientific peer-reviewed (Q1) papers published	0	Two (2) peer-reviewed papers from the results of SOILCARE Phase 1 submitted to Q1 journals	Six (6) peer-reviewed papers (Three [3] of them from Phase 2 results) accepted for publication in Q1 journals	Papers published online		
	Number of research project applications/funding bids of the RAC/NAT (including as a partner)	0	Two (2) research proposals drafted according to the research agenda by mid-term	Four (4) research funding bids submitted to international research calls	Concept notes on priority research topics Research proposals Paperwork of research funding applications		
	Number of participations/organization of Regional/international LDN/SS/SLM Research Forum/Conferences.	0	2	5	Reports of participation Media outputs Ppts and other materials produced		
Output 5.1.2 Capacity development program for LDN-focused and SSM/SLM based innovations in agriculture implemented.	Number of capacity development actions/training activities programmed and implemented under the project with at least 10% of the actions addressed specifically to women	Under SOILCARE 1 trainings were conducted on DSM, soil survey desk and fieldwork, laboratory techniques for Tier 1 soil analysis LDN, use of GEE DSS, Soil Doctors (Antigua and Barbuda and Saint Lucia; Trinidad and Tobago has also joined the Programme	The six (6) countries joining Phase 2 have received training on DSM, soil survey desk and fieldwork, LDN, use of GEE DSS, Soil Doctors, training on communication, C-SAC tool, harmonized databases for SIS RAC/NAT staff has received training on: DSM, survey design, biometrics, geoinformatics,	Mid-term target + 14 countries had training on drought, Tier 1 (for the six [6] Phase 2 countries) and Tier 2 (for the eight [8] Phase 1 countries) laboratory techniques, land use and management planning RAC/NAT staff has received training on: mid-term + new advance climate resilient technologies, SSM,	Participants lists Training reports	Competent persons or firms in all the key disciplines are available and willing to provide required training and technical support to target groups.	RAC/NAT Facility - Capacity Building/Training Consultant, National Consultant Soil Doctors, Indigenous Peoples Specialist

		recently), training on communication, C-SAC tool, harmonized databases for SIS. However, capacity assessments indicate that some areas require reinforced training. The impact of the SOILCARE Phase 1 capacity development plan has been heterogeneous, with trainings in laboratory SOPs being the most impactful up to today	Biofloc, soil and plant lab analysis	interpretation of data		Countries are willing to nominate represent atives to attend the training	
	Percentage of participants demonstrating increased knowledge through pre- and post-training assessments (% of women)		At least 50% of participants have scored between 80% – 90% in the post training assessment (including 50% of women)	At least 80% of participants have scored between 80% – 90% in the post training assessment (including 80% of women)	Pre- and post-training Google Forms Impact report for the capacity development program		RAC/NAT Facility - Capacity Building/Training Consultant, National Consultant
	Number of organizations integrating new knowledge into operational procedures or technical products		At least five (5) countries have developed products/SOP/guidelines/manuals that apply the skills/knowledge from the trainings	At least 10 countries have developed products/SOP/guidelines/manuals based on the training that required such outputs	Submitted materials/documents/products		
	Number of C-SAC certificates issued (for trainers) (% of women)	At least 150 extension officers certified to implement the C-SAC	Baseline + 100 (40% women)	Baseline + 200 (40% women)			
	Number of countries that integrate the soil health aspects into their regular extension workplan	Three SOILCARE countries (Antigua and Barbuda, Saint Lucia and Trinidad and Tobago) have a National Promoter for the Soil Doctors Programme	6 countries	14 countries	Correspondence of nomination. Records of the activity of the extension officers List of farmers exposed to the Soil Doctors activities	Countries see interest in widening their extension program to include soil health aspects Farmers are willing to participate in the program and become Soil Doctors.	
	Number of Soil Doctors certified (% of women)	Pilots of the Soil Doctors Program have been implemented in Antigua and Barbuda, Saint Lucia and Trinidad and Tobago (55 trainers, 44 soil doctors) (30% women)	150 (40% women)	570 (at least 30 per country in smaller countries and 60 per country in Belize, Guyana, Jamaica, Suriname, and Trinidad and Tobago). (40% women)	Certificates for trainers issued by FAO, certificates for Soil Doctors issued by National Promoters Reports of field visits (including graphic material) List of participants in sessions		
	Number of scholarships awarded (% of women)	Five (5) scholarships were awarded to attend the UWI for SSM, SLM, and LDN topics courses across Phase 1 countries.	At least 30 scholarships awarded (at least 15 to women).	At least 50 students awarded scholarships (at least 25 to women)	Copies of communication conferring award. Names of awardees disaggregated by sex and country. Certificate of completion (if studies are finished prior to	Young people across the 14 CSIDS are interested in enrolling in technical institutions to	RAC/NAT Facility in collaboration with local technical institutions.

					closure of project).	pursue training in target subjects. In-country tertiary institutions offer programs in target fields.	
Output 5.1.3 Communication, knowledge and information management improved through networks established in Phase I and in collaboration with the SIDSS - SIDS KTH.	% of stakeholders that report increased awareness and knowledge on land degradation, sustainable soil and land management and climate change adaptation (% of women)	0	50% (including 50% of women)	80% (including 80% of women)	Surveys. Communication impact reports		PISLM Secretariat and KTH Team, Knowledge Management and Communication Officer.
	Number of media pieces on the project activity and on soils/SSM/SLM (number of pieces on women role in the project or in fighting land degradation)	Media show interest in climate change and land degradation only occasionally, in relation with punctual events such as hurricanes or landslides. There is not an understanding on land degradation issues and impacts and on soils/SSM/SLM between media professionals or communication officers in governments	20% increase in number of pieces on the project topics and 20% increase in the number of media that disseminated the project and project activities (at least 14 –one per country–women focused pieces)	40% increase in number of pieces on the project topics and 40% increase in the number of media publishing on the project and project activities (at least 28 –two per country– women focused pieces)	Dossier of media pieces	Communication stakeholders and professionals are willing to understand the project and the issues it intends to tackle	
Output 5.1.4 PISLM Land Ambassadors programme implemented	Number of Land Ambassadors (% women)	0	14 (7 women)	17 (9 women)	Paperwork of applications received and approved. Records of handing over ceremony Records of Land Ambassadors activity	Stakeholders are interested in participating	
Outcome 5.2 The LDN approach is mainstreamed in relevant regional policy	Number of regional policy decisions from COTED that address matters pertaining to SSM/SLM/ and/or LDN and include gender aspects	No position papers/ COTED papers were submitted to COTED Agriculture in support of SSM/SLM and LDN under SOILCARE 1	At least one (1) position paper/ COTED paper submitted to COTED Agriculture in support of SSM/SLM and LDN	At least four (4) position papers /COTED papers submitted to COTED Agriculture in support of SSM/SLM and LDN	Item on the agenda of the Ministerial Taskforce Draft of the Official Papers (restricted circulation)	Ministers willing to support motions on SSM/SLM and LDN	PISLM Secretariat supported by FAO

frameworks as a cross-cutting intersectoral principle.							
	Number of sub-regional cooperation priorities identified on drought and flood management, monitoring and forecasting capacities, and resilience building	Drought and flood risk are considered of concern at the subregional level, but no cooperation topics have been identified and prioritized	One (1) cooperation field identified, and roadmap agreed for materialization considering gender aspects	One (1) cooperation topic with workplan for implementation and two (2) other fields identified and roadmap agreed for materialization	Roadmap documents Meeting minutes Workplan approved		
Output 5.2.1: Caribbean Soil Support Group for SSM/SLM expanded to include all SOILCARE Phase II countries collaborating with ASLAC and UNCCD focal points and acting as science-policy interface in regional fora.	Number of contributions on priority soil issues to policy development at the regional level.	0	At least 1	At least 3	Official text of the contributions.	Countries have public officers who are willing and available to participate	PISLM Secretariat
Output 5.2.2: Standardized procedure for LDN TSP 2	Number of countries adopting guidelines for harmonised LDN TSP	0 guideline documents for LDN TSP 2	Guideline document drafted and piloted for LDN TSP 2	All countries have submission ready LDN TSP 2	Notes of consultations Draft LDN TSP 2 documents Draft cabinet notes/ instruments	Countries acknowledge the need of an improved LDN TSP and are willing to collaborate in its formulation	PISLM Secretariat supported by FAO
Output 5.2.3 Sub-regional structures on integrated planning for drought and flood	Number of stakeholders (by type) in sub-regional platforms for the coordinated management of drought and flood risk (% of women)	No sub-regional platform for coordination of drought and flood cooperation exists	One (1) platform created including 10 sub-regional stakeholders (including at least one [1] private entity) (30% women)	One (1) platform created including 20 sub-regional stakeholders (including at least two [2] private entities) (30% women)	ToR and Rules of procedure of the Platform Annual workplan Meeting minutes	Countries acknowledge the need of a coordinated response to drought and flood risk at the	

risk mitigation created and strategies promoted	Number of position papers prepared for consideration at regional fora	0	1	3	Draft position papers Records of submission	subregional level	
M&E 1: Project is technically sound and timely implemented and managed based in results	% of activities implemented according to annual workplan	0	100%	100%	Annual workplans and related reports of accomplishment	-	-
M&E 1.1. Data for project indicators collected (at least) on an annual basis.	Number of reports on project performance and technical reviews, including collaborations with other projects	0	Two (2) reports on project performance and technical reviews	Five (5) reports on project performance and technical reviews	Annual monitoring reports, indicator tracking sheets, compiled datasets. Reports on technical aspects reviewed with assessment of options	All project indicators are measurable, and data can be collected without major constraints. Institutional capacity and resources remain available for timely M&E implementation.	RPU and M&E Specialist
M&E 1.2. Annual workplans prepared	Number of annual workplans with detailed timeline for each activity, milestones, deliverables and resources allocated	0	2	5	Annual workplans		
M&E 1.3 Gender-sensitive and responsive Annual Project Implementation Reports (PIR), Project Mid-Term and Final Evaluations submitted to GEFSEC in a timely manner.	# of Annual PIRs, Mid-Term Review (MTR), and Final Evaluation reports submitted to GEFSEC on time	0	Two (2) PIR, one (1) MTR	Four (4) PIR, one (1) MTR, one (1) Final Evaluation	Submitted PIRs, MTR, Final Evaluation reports, GEFSEC acknowledgment of receipt		
M&E 1.4. GAP implemented.	% of GAP activities implemented	0	100	100	GAP progress reports, documentation of gender-responsive activities, stakeholder engagement records.	Gender indicators are measurable, and data can be collected without major constraints. Institutional	RPU and M&E Specialist. Gender and social safeguards specialist

						capacity and resources remain available for timely implementation.	

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

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

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Activity 1. Data analysis and drafting of Project Document. Consultancies to develop project proposal: • Project design • GHG emission calculations • Climate impact assessment • LDN assessment • Gender analysis and planning • Social safeguard analysis and planning • Financing mechanism design	259,995.00	134,352.00	135,643.00
Activity 2. Meetings and consultations. • Validation workshop. Meeting venue, catering, audiovisual and simultaneous translation services for four days	14,000.00	14,000.00	0.00
Activity 2. Meetings and consultations.• Validation workshop. Mobilizing representatives from 14 countries to attend the validation workshop (at least one representative per country) as well as PSILM staff. Estimated attendants between 20 and 30 people.	10,000.00	10,000.00	0.00
Activity 2. Meetings and consultations • Validation workshop. Daily subsistence allowance per participant	16,000.00	16,000.00	0.00
Total	**299,995.00**	**174,352.00**	**135,643.00**

ANNEX E: PROJECT MAP AND COORDINATES

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

Location Name	Latitude	Longitude	GeoName ID
Sedge Pond	13.24311	-59.593835	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID

Greenland Over Hill	13.26654	-59.582493	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Coggins Estate	13.22824	-59.561365	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Dumfries	12.27637	-61.27481	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Belle Vue South	12.27127	-61.28003	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Top Hill	13.27762	-61.15246	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Perseverance	13.31385	-61.22311	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID

Chatham Bay	12.60146	-61.44421	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Holland Estate	18.09823	-77.81739	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Kimbia	5.62735	-57.76655	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Cayon	17.35424	-62.74358	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Cayon	17.34942	-62.72014	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Cades Bay	17.02713	-61.86252	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID

Soufriere	13.85553	-61.03685	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Kalinago Territory	15.50153	-61.25844	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Quayaneri Watershed	15.34162	-61.25798	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
National Quarries Ltd	10.63403	-61.13644	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
St. Michael Watershed	10.66613	-61.35414	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Gladstone Road Agricultural Centre (GRAC	25.01956	-77.40465	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID

Grand Bahama National Forest Estate	26.68745	-78.03393	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Saramacca	5.75105	-55.40475	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Brokopondo	5.08212	-54.92641	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Pearls, part of the La Poterie to Paradise Area	12.15438	-61.62176	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Pearls, part of the La Poterie to Paradise Area	12.13981	-61.62311	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Pearls, part of the La Poterie to Paradise Area	12.14525	-61.60954	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID

Pearls, part of the La Poterie to Paradise Area	12.15196	-61.61335	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Cayon	17.34922	-62.54661	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Mannings	17.13892	-62.54661	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Moco Moco	3.32916	-59.67588	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Lot 14 Orange Hill	13.16495	-61.21227	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Coulibistrie Watershed	15.48243	-61.42144	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID

Smith's Bay Farm Road, Cat Island	24.35139	-75.48544	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Plum Mitan	10.45052	-61.08561	

Location Description:

Activity Description:

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

Please refer to *Annex E : Map & Coordinates* under Documents where maps where project interventions are taking place have been provided

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title
Annex K - Gender Analysis and Action Plan_22Oct2025
Annex J - Stakeholder Engagement Plan and GRM
Annex F - Environmental and Social Management Plan_17Oct2025
Annex F-2 - Indigenous people plan_24Apr2025
ANNEX F-1_Full Environmental and Social risk screening checklist_03Jun2025

ANNEX G: BUDGET TABLE

Please upload the budget table here.

ANNEX G - 1: BUDGET TABLE AND WORK PLAN

Commented [NB1]: @LewisClarke, Danielle (FAOSLC) to finalize based on detailed budget

BUDGET

Cost Categories	Component 1 Total	Component 2 Total	Component 3 Total	Component 4 Total	Component 5 Total	M&E	Subtotal	PMC	Total	Responsible Entity
5013 Consultants										
Project Manager	0	0	0	0	0	0	0	252,000	252,000	PISLM
Procurement Officer (cost share)	0	0	0	0	0	0	0	123,000	123,000	PISLM
Administrative and Logistic Support Officer	0	0	0	0	0	0	0	72,000	72,000	PISLM
Knowledge Management and Communication Officer	0	30,000	0	0	90,000	0	120,000		120,000	PISLM
Gender and Social Safeguard Specialist	0	0	0	0	0	0	0	120,000	120,000	PISLM
Monitoring and Evaluation Specialist	0	0	0	0	0	120,000	120,000	0	120,000	PISLM
PISLM Liaison Officer	48,000	48,000	48,000	48,000	48,000	0	240,000	0	240,000	PISLM
SOILCARE Integration Specialist	0	0	0	108,000	162,000	0	270,000	0	270,000	PISLM
Digital soil mapping Specialist	60,000	0	0	0	0	0	60,000	0	60,000	PISLM
Investment and Finance Specialist in SLM &SSM	0	0	0	36,000	0	0	36,000	0	36,000	PISLM
Regional deployment of the Soil Doctors Programme	0	0	0	0	24,000	0	24,000	0	24,000	PISLM
Sub-total international Consultants	*108000*	*78000*	*48000*	*192000*	*324000*	*120000*	*870,000*	*567000*	*1437000*	
National Technical Assistant	294,000	294,000	294,000	294,000	294,000	0	1,470,000	0	1,470,000	PISLM

(one per country)										
RAC NAT Facility - *SSM, Soil Research and Lab Consultant*	56,250	0	23,750	0	70,000	0	150,000	0	150,000	PISLM
RAC NAT Facility - Plant Research Consultant	0	0	75,000	0	75,000	0	150,000	0	150,000	PISLM
RAC NAT Facility - Climate Smart & Agri. Marketing Consultant	0	0	10,400	40,000	0	0	50,400	0	50,400	PISLM
RAC NAT Facility - Drought and Flood Specialist	0	0	50,400	0	0	0	50,400	0	50,400	PISLM
RAC NAT Facility - LDN/SLM Consultant	36,000	54,000	30,000	0	30,000	0	150,000	0	150,000	PISLM
RAC NAT Facility - GIS Consultant	120,000	0	0	0	30,000	0	150,000	0	150,000	PISLM
RAC NAT Facility - GIS Technicians (2)	150,000	0	0	0	42,000	0	192,000	0	192,000	PISLM
RAC NAT Facility - Capacity Building/Training Consultant	36,000	12,000	12,000	12,000	48,000	0	120,000	0	120,000	PISLM
ICT Consultant	78,000	0	0	0	42,000	0	120,000	0	120,000	PISLM
Land/Soil Policy/Legislation Specialist	48,000	0	0	0	72,000	0	120,000	0	120,000	PISLM
Social Safeguard and Indigenous Peoples Specialist	0	36,000	30,000	30,000	24,000	0	120,000	0	120,000	PISLM
National Consultant Soil Doctors	0	12,000	12,000	0	0	0	24,000	0	24,000	PISLM

Sub-total national Consultants	818,250	408,000	537,550	376,000	727,000	0	2,866,800	0	2,866,800	
5013 Sub-total consultants	**926,250**	**486,000**	**585,550**	**568,000**	**1,051,000**	**120,000**	**3,736,800**	**567,000**	**4,303,800**	
5650 Contracts										
Support to the upgrade of national soil labs	950,000	0	0	0	0	0	950,000	0	950,000	PISLM
Implementation and capitalization of the Caribbean LDN Transformative Funding Mechanism	0	0	0	150,000	0	0	150,000	0	150,000	PISLM
Seed Funding:Caribbean LDN Transformative Funding Mechanism (per country)	0	0	0	1,500,002	0	0	1,500,002	0	1,500,002	PISLM
Enhancement of monitoring, forecasting and risk assessment capacities of the Caribbean Drought and Precipitation Monitoring Network	0	0	150,000		0	0	150,000	0	150,000	PISLM
PISLM Land Ambassadors Programme	0	0	0	0	150,000	0	150,000	0	150,000	PISLM
Youth Innovation Agricultural Development Initiative (YARDI)	0	0	0	300,000	0	0	300,000	0	300,000	PISLM
Youth Agro Business Programme (YABI) (linked to CARICOM	0	0	0	350,000	0	0	350,000	0	350,000	PISLM

25x25 initiative)										
Grant programme (for students pursuing courses in agriculture, forestry, and related areas in technical institutions in SOILCARE countries)	0	0	0	0	300,000	0	300,000	0	300,000	PISLM
Indigenous Peoples land restoration initiative supporting implementation of SSM and SLM	0	200,000	0	0	0	0	200,000	0	200,000	PISLM
Services to support strategic organizational development of RACNAT	0	0	0	0	30,000	0	30,000	0	30,000	PISLM
Geoinformatics Hub/Unit (RAC/NAT Facility)	0	0	0	0	350,000	0	350,000	0	350,000	PISLM
LDN/SLM Knowledge Hub	0	0	0	0	80,000	0	80,000	0	80,000	PISLM
Capacity Building and resource development in QC/QA of reference labs	150,000	0	0	0	0	0	150,000	0	150,000	PISLM
Publication, Translation, Dissemination and reporting	0	0	0	0	30000	0	30,000	0	30,000.00	PISLM
Mid-term Review	0	0	0	0	0	70,000	70,000	0	70,000.00	FAO
Terminal evaluation	0	0	0	0	0	100,000	100,000	0	100,000.00	FAO
Terminal Report	0	0	0	0	0	6,585	6,585	0	6,585.00	FAO

OPIM Annual Audit	0	0	0	0	0		0	45,000	45,000.00	FAO
OPIM Spot Checks	0	0	0	0	0	40,000	40,000	0	40,000.00	FAO
5650 Sub-total Contracts	1,100,000.00	200,000	150,000	2,300,002.00	940,000	216,585	4,906,587	45,000	4,951,587.00	
5021 Travel										
Travel and DSA - PMU and consultants	0	72,500	72,500	72,500	72,500	0	290,000	0	290,000.00	PISLM
Local travel (14 countries)	0	23000	23,000	0	10,000	0	56,000	0	56,000.00	PISLM
Travel for training/workshops and meetings (National Representatives etc.)	0	0	0	0	1,100,000	0	1,100,000	0	1,100,000.00	PISLM
5021 Sub-total travel	0	95,500	95,500	72,500	1,182,500	0	1,446,000	0	1,446,000.00	PISLM
5023 Training										
Inception Workshop	0	0	0	0	0	50,000	50,000	0	50,000	PISLM
Regional LDN/SSM/SLM Research Conference	0	0	0	0	160000	0	160,000	0	160,000	PISLM
Regional Project Steering Committee meeting (co sponsored by host countries)	0	0	0	0	0	200,000	200,000	0	200,000	PISLM
Caribbean Soil Support Group meetings	0	0	0	0	125000	0	125,000	0	125,000	PISLM
Caribbean Soil Lab Network meeting	125000	0	0	0	0	0	125,000	0	125,000	PISLM
Caribbean Soil Information System Network meetings	125000	0	0	0	0		125,000	0	125,000	PISLM
Sustainable Land/Soil Management	0	0	0	0	125000	0	125,000	0	125,000	PISLM

Framework Group										
PISLM Ministerial Council/Joint COTED Meeting [Env. & Agri.]/OECS COMES	0	0	0	0	200000	0	200,000	0	200,000	PISLM
Group Training (Capacity Building & Training)	75,000	25000	50000	0	300000	0	450,000	0	450,000	PISLM
Soil Doctor Sessions (14 countries)	0	70000	70000	0	0	0	140,000	0	140,000	PISLM
5023 Sub-total training	325,000	95,000	120,000	0	910,000	250,000	1,700,000	0	1,700,000	PISLM
5024 Expendable procurement										
Office supplies and consumables (paper and other supplies)	0	0	0	0	0	0	0	30,000.00	30,000.00	PISLM
5024 Sub-total expendable procurement	0	0	0	0	0	0	0	30,000	30,000.00	PISLM
6100 Non-expendable procurement										
Office equipment (Computers, Printers, etc.)	28000	0	0	0	0	0	28,000		28,000	PISLM
Equipment and materials for upgrade of 14 soil labs	1260000	0	0	0	0	0	1,260,000	0	1,260,000	PISLM
Equipment and materials for soil Regional Reference Lab	210000	0	0	0	0	0	210,000	0	210,000	PISLM
Equipment for Soil and Plant Research	0	0	0	0	230,000	0	230,000	0	230,000	PISLM

(RAC/NAT Facility)										
Materials and equipment for the establishment of Caribbean soil archive and data library	150000	0	0	0	0	0	150,000	0	150,000	PISLM
Equipment and materials for the Caribbean Soil Doctors Programme (14 countries, 30 kits) (RAC/NAT Facility)	0	0	0	0	70,000	0	70,000	0	70,000	PISLM
Equipment and materials for implementation of SSM, SLM and drought-smart land and water management options	0	1,786,988	962,224.20	0	0	0	2,749,212	0	2,749,212	PISLM
Equipment and plant material-Communtiy Propagation Centres	0	600,000	0	0	0	0	600,000	0	600,000	PISLM
Real time moisture monitoring sensor stations	0	0	60000	0	0	0	60,000	0	60,000	PISLM
6100 Sub-total non-expendable procurement	1648000	2386987.8	1022224.2	0	300,000	0	5,357,212	0	5,357,212	PISLM
5028 GOE budget										
Office Premises	0	0	0	0	0		0	133500	133,500.00	PISLM
Utilities	0	0	0	0	0		0	24000	24,000.00	PISLM
Communicati	0	0	0	0	0		0	22000	22,000.00	PISLM

ons (tel, fax, e-mail, etc..)										
6300 Sub-total GOE budget	0	0	0	0	0	0	0	179,500	179,500.00	PISLM
TOTAL	3,999,250	3,263,488	1,973,274	2,940,502	4,383,500	586,585	17,146,599	821,500	17,968,099	

Please explain any aspects of the budget as needed here

ANNEX I: 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.

STAP COMMENTS	AGENCY RESPONSE
Project rationale, and project description	
STAP appreciates the description of land degradation in the Caribbean SIDS. Several factors influence soil and land degradation in the region, including floods, drought, and other extreme events. These drivers are touched on in the PIF, although more detailed information about their effects on land management will likely be necessary for the design of each country project. Considering other drivers, such as population and market changes, will also be helpful to understand their potential impacts on the project interventions. Land Degradation Neutrality (LDN) is proposed as an integrated approach to tackle the multiple causes affecting degradation. As written, it is evident the project proponents understand LDN and its potential as an integrated approach. The theory of change presents the project's medium to long-term change outcomes, which STAP appreciates. Further attention to resilient outcomes is highly recommended given the Caribbean 2 SIDS's vulnerabilities to climate change and to economic shocks and stresses. As the project is developed, greater attention to the barriers and assumptions will be necessary. STAP appreciates the project's ambition to scale best practices on sustainable land management via innovative financing. Attention to strong levers of change (e.g., change of mindsets) will likely be needed, along with learning that results from testing/validating assumptions associated with innovative financing and sustainable land management. Thus, a theory of change (narrative and figure) is needed that demonstrates the connections between an enabling environment, innovative finance, sustainable land management, and knowledge management and learning. Below, STAP provides advice on how to improve the project during its design.	Thank you for the comments and recommendations. Effort has been put in integrating them into project design. Please see the responses to specific comments below.
Specific comments	

STAP recommends paying close attention to resilient, positive outcomes that are enduring. To achieve this, STAP highly recommends developing simple future narratives. This process will assess how the future may unfold and propose ways to make the interventions robust to uncertainty. Given the vulnerabilities faced by Caribbean SIDS to climate change and other shocks, this future planning is a necessity. The application of STAP's advice on future narratives is strongly encouraged. In addition, STAP recommends that risks such as political instability in countries like Haiti be included in the risk assessment. The International Rescue Committee identifies Haiti as one of the countries most at risk of experiencing a worsening humanitarian crisis in 2024. These factors can impact the ground implementation, including the durability of outputs under components 2 and 4.	Thanks for the recommendation. During PPG, different strategies and their capacity to provide the intended benefits under different scenarios were considered and discussed with stakeholders. The most robust strategies were selected, many of them having also been tested within Phase 1 of the CSIDS-SOILCARE and other projects, while other selected strategies have been assumed to be adequate from scientific literature. The testing of those assumptions has been included in the prodoc as suggested below, and simple narratives have been included regarding the main drivers of degradation. The project design considers political and social unrest, in particular in Haiti, as risks to the project execution (moderate) and to sustainability of the results (low)
The project rationale and description begin to detail the climate change stresses faced by Caribbean SIDS. Suggest adding explicit climate change data to inform future narratives and the interventions. If available, use downscaled climate information. A description of national level climate trends is available in the World Bank Climate Knowledge Portal in case this information is useful. Project proponents could also consider using the World Bank's climate and disaster risk screening tool during the project design.	Climate change projections have been included into the rational and derived risks and uncertainty considered in project design. The Climate Data Portal of the World Bank has been consulted and data included, which can be seen in the project rationale and in the references in footnotes.
The project will rely on knowledge and learning generated from SOILCARE I, which STAP is pleased to know. Several learning gaps, or assumptions, are identified in the proposal on LDN, SLM (as an approach to address climate vulnerability and overall resilience), and transformative finance (components 2-4). STAP recommends explicitly defining these as assumptions that underpin the outcomes for components 2-4, and testing the assumptions to generate knowledge. This knowledge should also inform component 5.	The activities that incorporate SOILCARE Phase 1 lessons learned have indeed been considered assumptions, and a strong monitoring system for tracking effects and verifying impacts has been included in the project design. The M&E activities include technical revisions (at least) yearly, to ensure that actions assumed to be effective are providing benefits as anticipated. The learnings from that process are planned to be incorporated in capacity development and knowledge transfer actions under component 5, and will inform the technical and scientific publications that will result from project activity.
STAP supports the LDN focus of the project and, for this reason, encourages the project proponents to implement integrated land use planning (ILUP). This approach can assist countries in determining the counterbalancing actions to address unavoidable land degradation, particularly countries that are further ahead with their LDN application from SOILCARE I. Additionally, careful attention to assessing the potential of the land will also be necessary. STAP's LDN guidelines, UNCCD's ILUP and LDN framework are useful resources to guide the design of ILUP, and an assessment of land potential.	The integrated Land Use Planning approach is the basis of the planning activities included under component 2 (to avoid, reduce and reverse land degradation) and component 3 (to reduce drought and flood risk). Assessments of land potential will be undertaken before the site-specific SLM and SSM strategies are selected and implemented on-the-ground
The project seeks to identify alternative livelihood options for the community. Suggest drawing from STAP's note on alternative livelihoods to design component 4. In addition, STAP's advice on agrivoltaics can helpfully reinforce activities aimed at reducing deforestation from land conversion. Evidence suggests that agrivoltaics can reduce deforestation while providing benefits across the food–energy–water nexus as suggested by Barron-	The full component 4 seeks to provide improved livelihoods through improved SLM-based agribusiness activities and increased access to funding. Socio-economic and socio-cultural factors driving livelihood decisions and cost-benefit assessments that include environmental aspects will be carried out before the funds are allocated to specific enterprises, and their effects will be monitored including Ex-post assessments. The

Gafford et al., 2019). (Full reference: Barron-Gafford, G. A., Pavao-Zuckerman, M. A., Minor, R. L., Sutter, L. F., Barnett-Moreno, I., Blackett, D. T., ... & Macknick, J. E. (2019). Agrivoltaics provide mutual benefits across the food–energy–water nexus in drylands. Nature Sustainability, 2(9), 848- 855.)	design elements recommended by SATO for successfully promoting alternative livelihoods (a multidimensional approach, equitable distribution of benefits, economic security and stability in income and employment, and clear logic for the intervention supported by a strong theory of change that links enabling environment, innovative finance, sustainable land management, and knowledge management and learning) have been considered in project design. All interventions will be co-designed with stakeholders through participatory processes.

Stakeholder engagement and private sector involvement

118. The project design process involved extensive and continuous consultations with stakeholders during PIF and PPG phases, coordinated by the PISLM Secretariat. This included Governments (including national Focal Points to the UNCCD and to the GEF), Inter-Governmental Organizations (IGO), (International) Non-Governmental Organizations ((I)NGO), academic institutions, private sector, and Civil Society Organizations (CSO). The consultation process enabled the integration of diverse perspectives, aligning project objectives with region all national priorities and international commitments, such as the UNCCD and LDN targets, ensuring relevance and buy-in. A Validation Workshop of the project document design was convened in November 2024, followed by further consultations with the 14 countries on the national project sites and the activities to be prioritized.

119. The project implementation phase will engage a range of stakeholders from the public and private sector, as well as civil society and research and academic institutes. At the policy level, the main vehicle for stakeholder engagement will be through the PISLM Ministerial Body and the COTED within CARICOM. In terms of regional technical personnel attached to a range of Regional Institutions, their engagement will be accomplished in part through the various PISLM organs established under CSIDS-SOILCARE Phase 1 (e.g. CARSOLAN, CSSG), and new networks that will be stablished in Phase 2 (such as the CARSIS network). Engagement will be also promoted through direct communication to government ministries, civil society, academia and local communities and resource users.

120. Stakeholders will benefit from the project through a diversity of avenues, and the project will ensure an equitable distribution of benefits among beneficiary stakeholders. Quite notable benefits are access to up to date and/or improved datasets on the LDN indicators; increase access to Caribbean-specific technical, traditional, and indigenous technologies for SSM, SLM and LDN; new knowledge emanating from regional research; reduce pressure on land and soil resources through site specific interventions and sustainable livelihoods, with a focus on youth and women and indigenous peoples; enhancement of the enabling environment for data sharing and research on soils; drought and flood risk reduction; and mechanisms for sustainable financing.

121. A summary of the stakeholders and their roles within the project is provided in the following table (see details and engagement plan in Annex J):

Stakeholders	Type of stakeholder	Roles in Project Implementation
PISLM	IGO	Executing Agency. Role and responsibilities defined in section B1
United Nations Food and Agriculture Organization (UN FAO)	IGO	Implementing Agency. Role and responsibilities defined in section B1. Resource partner.
The PISLM Ministerial Council	IGO	Policy oversight for the project. Integration of the project results into the various Caribbean Community Policy Framework.

Stakeholders	Type of stakeholder	Roles in Project Implementation
CARICOM and its Organs (e.g. COTED)	IGO	Integration of the project results in the various Policy Frameworks of the Community. Providing the regional policy framework for implementation of the various Project Outputs.
OECS	IGO	Provide technical advice. Collaborator in specific aspects of the project.
UN Agencies	IGO	Provide technical advice.
Caribbean Development Bank	IGO	Assist in mobilizing private and public funds for specific aspects of the project implementation. Provide technical assistance in structuring financial options for post project continuation. Resource partner
Caribbean Agricultural and Research and Development Institute	IGO	Technical guidance and training in sustainable agricultural practices. Resource partner
Caribbean Institute of Meteorology and Hydrology	IGO	Will provide support to the project on climate related issues, in particular on drought monitoring and forecasting through its Caribbean Drought and Precipitation Monitoring Network (CDPMN). Resource partner.
Other IGOS		Provide technical advice.
Inter-American Institute for Cooperation in Agriculture	INGO	Technical guidance and training in sustainable agricultural practices. Resource partner
Other (I)NGOs	(I)NGOs	Provide technical advice.
Ministries of Environment and Agriculture of the 14 countries	Gov	Contribute to the execution of the project on a national level; ensure compliance with national and international commitments; supervise implementation of LDN, NDC, and biodiversity goals. Members of Project Steering Committee. Resource partners.
Other Ministries and Departments of the 14 countries (e.g. Planning and Gender Departments, Water Services, etc.)	Gov	Partners. Provide technical advice. Contributing to intersectoral and multistakeholder dialogues and planning processes. May support specific aspects of the project on a national scale. Resource partners.
National Focal Points to UNCCD, Global Soil Partnership, UNFCCC, and GEF	Gov	Liaise with those entities and processes on behalf of their respective country. The national Focal Points to the UNCCD will also serve as Focal Points for this project and will be responsible for the oversight of the Project at the national level and ensuring effective participation in the regional activities being undertaken under the project.
Indigenous Peoples and their Organisations	CSO	Beneficiary. Contributing to multistakeholder dialogues and planning processes. Resource Partner
Youth Organisations	CSO	Beneficiary. Contributing to multistakeholder dialogues and planning processes. Resource Partner
Women's Organisation	CSO	Beneficiary. Contributing to multistakeholder dialogues and planning processes. Resource Partner
Farmers organizations	CSO	Beneficiary. Contributing to multistakeholder dialogues and planning processes. Resource Partner
Other CSO	CSO	Beneficiary. Contributing to multistakeholder dialogues and planning processes. Resource Partner
Universities	Academia	Beneficiary. Contributing to multistakeholder dialogues and planning processes. Provide technical and scientific input, assistance with the delivery of the training aspects of the project. The input of the UWI – St Augustine Campus is expected specifically in component 1, so their experience in the implementation of similar tasks in the CSIDS-SOILCARE Phase 1 can be leveraged and lessons learnt effectively incorporated into Phase 2. Resource Partners
The private sector entities supporting small and micro business development	Private sector	Resource partner/Beneficiary. Collaborates in different aspects of the project through synergies and other collaborative arrangements, with consideration to private corporations that operate in the region such as Massy Holdings Ltd. (Massy Group), Marriot International Inc. and Hilton Hotels & Resorts.
Private sector financial institutions	Private sector	Resource partner - To provide input and funding towards the activities to be implemented under Component 4 of the project. These may include credit unions and banks.

122. The intentional engagement of the private sector to reverse unsustainable trends in land use is a central tenet and approach of CSIDS-SOILCARE Phase 2. This is based on the premise that the key drivers of land degradation are rooted in economic systems that are unsustainable.[37][40] The involvement of private stakeholders in the project will thus be crucial for transformational change and to achieve the project's goals of LDN and climate resilience. By partnering with them, the project can leverage their expertise and resources to implement sustainable practices and generate environmental and societal benefits, transform market systems and enhance SLM-based value chains. Key private sector stakeholders will be engaged through four (4) main modalities

- **As direct beneficiaries: Smallholder farmers will be the target beneficiaries of capacity building activities under all project components. The project will collaborate with farmers to adopt SSM and SLM focused on halting land degradation and improving climate resilience. The engagement of women and young agropreneurs will be specifically sought in creating and scaling-up SLM-based business enterprises. Rural communities operating agro- and eco-tourism enterprises will benefit from increased income earning opportunities. The restoration and adoption of improved practices on degraded forest, croplands, and rangeland intervention areas is expected to increase stocks of land capital and ecosystem services, with positive implications for land productivity, food security and the livelihoods of small farmers and other land dependent entrepreneurs and populations. Farmers, and the wider population, will benefit also from a strengthened regional multi-hazard monitoring system, from the new knowledge generated from the research project, and a more strategic approach for drought and flood smart land management planning. Private sector stakeholders, including budding young farmers (e.g., via the YARDI and Youth Agri Business Programme) will now have access to a dedicated pool of finance to incentivize the uptake of wise land use practices in business operation, with the goal of attaining LDN.**

- **As agents of business development: In addition to beneficiaries, medium, small and micro enterprises will be also agents for sectoral development by providing a greening pathway to environmentally sustainable and resilient economic activity that integrates soil and land health in decision making and participate in multistakeholder dialogues on planning strategies. They will be invited to assess and provide advice on the marketability of proposed business ideas, and to contribute to the communication of the business benefits of addressing environmental issues (e.g. cost savings, reduced risks) and to support the strengthening of the enabling policy and socio-economic environment for LDN.**

- **Actors in increased private financing: private entities will be key for the operationalization and capitalization of the LDN TFM. Private sector financing institutions will be invited to be part of multi-stakeholder mechanisms to further promote an enabling environment for investments on LDN.**

- **As partners/collaborators: Private sector actors will collaborate in different aspects of the project through contracts and other collaboration arrangements.**

To ensure that private sector is effectively engaged and their buy-in to project strategies, key private stakeholders and representatives of governmental private sector related services (e.g. Commerce Chambers) will make part of the project governance structures (e.g. Regional Project Steering Committee and National Inter-Agency Advisory Groups) and multistakeholder mechanisms for implementation.

Innovation & Transformative Change, Knowledge management, Policy coherence and Capacity development

Innovation and Transformative Change

123. SOILCARE Phase 2 is structured to achieve innovative and transformative change within the context of states capacities to pursue and attain LDN. Consistent with the STAP's pathways to transformation, achieving the step-change in GEBs is likely to occur through a scale up of sectoral and regional outcomes to levels that are globally significant.[38][41] This scaling up will occur via four windows of activities.

124. Rehabilitation of degraded lands in intervention areas under Component 2 were intentionally prioritized and selected based on hotspots identified in countries LDN TSPs. The strategic intent is to expand high performing SSM and SLM measures to larger areas across degraded watersheds within the original intervention areas and/or to different localities exhibiting similar microclimatic and biophysical conditions. This would be achieved through the design and implementation of a Transformational Project, previously endorsed by Member States as a critical action post CSIDS-SOILCARE Phase 2. Using this proactive investment approach, and building on capacities at the community level, entire landscapes across diverse agroecological and forest ecosystems can be transformed, supporting countries pursuit to LDN, coupled with socioeconomic co-benefits.

125. Relatedly, the new knowledge generated through implementation of the Small Farmers Drought Mitigation Scheme offers a golden opportunity for scaling up across new areas within and outside the national demonstration sites. Technology transfer of Caribbean specific drought mitigation measures, including drought tolerant landraces proven to improve crop productivity under meteorological, hydrological and/or agricultural drought conditions would be achieved through the preparation and rollout of scalability plans. These plans should integrate approaches to engage multistakeholder groups not involved in the intervention area to foster ownership of any planned replication of appropriate technology at an early stage.[39]42 Scalability plans would be implemented by national competent authorities in partnership with farmers - with institutional support delivered through the PISLM RAC/NAT Facility, and other regional agricultural research and development agencies.

126. Through leveraging financing and market forces, value chain and alternative livelihood investment projects with a strong profitability and sustainability potential from both CSIDS-SOILCARE Phase 1 and 2. The idea is to utilize the innovative LDN TFM as a vehicle to mobilize financing from non-SOILCARE sources to fund the investment project, that scales up individual sustainable enterprises across new markets.

127. The fourth avenue is through the research and innovation programme led by the PISLM RAC/NAT Facility under Component 5. Although the research initiatives undertaken by the Facility are not expected to be completed during the CSIDS-SOILCARE Phase 2 project cycle, the new knowledge for building robust and resilient soil and land systems are intended to deliver systemic changes for land and soil health subregionally. Scaling up would be achieved through technology transfer facilitated through strategic partnerships with the Ministries of Agriculture and other national, regional and international agencies. The 10-year strategic plan and Investment instruments developed under CSIDS-SOILCARE Phase 2 to underpin the Facility's sustainability, are major enablers of this process.

<u>Knowledge Management</u>

128. The project will benefit from existing knowledge produced via CSIDS-SOILCARE Phase 1, through the methodologies used and/or adapted to upgrade the national soil labs and execute the national soil surveys. The lessons learned via these processes are extremely important in limiting risks and crafting solutions to address potential hurdles and pitfalls in Phase 2. The development of the protocol for the movement of soil for analytic purposes in CSIDS-SOILCARE Phase 2 is indicative of this adaptive learning. In addition, the approaches undertaken to restore and foster improved SSM and SLM practices in intervention areas will create knowledge for *inter alia* on suitable technologies for reducing land degradation, strategies for community engagement and working with national authorities, and best practices for implementation of monitoring protocols. This is also applicable for the work undertaken in Phase 1 to establish CARSIS and the DSS, the Soil and Land Outlooks, the PISLM Knowledge Hub, among others.

129. Similarly, the project will generate knowledge on SOC for the six (6) new countries through roll out of the national soil surveys, and CSIDS data on land cover and productivity. The three (3) land-based indicators and metrics would provide a strong pathway for generating knowledge more aligned with the actual status of land degradation in each of the participating states, enhancing the accuracy of the PRAIS reports, and catalysing greater evidence driven policies and programmes. Findings from research and field-based monitoring activities, including work spearheaded by the PISLM RAC/NAT Facility and the Small Farmer Drought Research Scheme, the annual Regional LDN/SSM/SLM Research Conference, and adapted methodologies developed to carry out field work, that incorporates the nuances of the Caribbean context are all major avenues for knowledge generation. Importantly, advanced research using the Soil Archive and Data Library is expected to generate new

knowledge on soils that is aligned to the prioritized environmental and developmental trajectory of the region – a major plus for accessing verifiable, scholarly material on Caribbean soils.

130. Knowledge will be captured and stored through various digital platforms - CARSIS and the DSS, the Green Blue SIDS-SIDS KTH hosted at the UWI Cave Hill Campus in Barbados with links to CARSIS, CIMH, and the Caribbean Land and Soil Outlook. CSIDS-SOILCARE Phase 2 is also designed to publish scholarly material based on ongoing research via reputable journals, enhancing access to Caribbean centric knowledge, which is a major gap in the region. This knowledge has tremendous benefits for future projects that focuses on soil and land management, biodiversity conservation, climate resilient systems, in particularly food systems.

Policy Coherence

131. The project adopts an innovative approach to policy development. Recognizing that the long-term effectiveness of all the measures and approaches on SSM/SLM for LDN will require strategic policy support on a continuous basis, CSIDS-SOILCARE Phase 2 seeks to further enshrine SSM & SLM into the regional policy frameworks through ongoing engagement with COTED to secure approval and endorsement on key policy decisions. This strategy to policy development would be used to secure approval and endorsement for the protocol for the regional movement of soil, the LDN TSP 2.0, CARSIS Data Sharing Policy, and the Subregional Drought and Flood Smart Land Management Strategy – thus increasing the potentiality for national implementation. COTED is a proven effective vehicle for mainstreaming priority matters of regional importance within CARICOM. Moreover, via the Youth Innovation Programme, young people will contribute to attainment of CARICOM's 25x25 policy initiative on food security through the design and roll out of innovative SSM/SLM agriculture businesses.

132. Several national policies and regulations across the participating Caribbean countries present potential risks that could counteract the intended project outcomes of CSIDS-SOILCARE Phase 2. In Belize, the Maya Customary Land Rights (2015 CCJ Consent Order) mandate Free, Prior and Informed Consent (FPIC) for any interventions in Indigenous territories, such as soil mapping in the Toledo District. Dominica's Kalinago Territory Carib Reserve) Act (1978, as amended) similarly requires coordination with the Kalinago Council for land rehabilitation, ensuring community-led planning. Grenada's Forest, Soil and Water Conservation Act (1949) prohibits land degradation practices like squatting, which affects grazing management in Carriacou, while its Disaster Management Act (2023) supports integration of SOILCARE's flood and drought mitigation strategies. In St. Vincent and the Grenadines, slope farming is regulated under the Forests, Soil and Water Conservation Act (1992), requiring CSIDS-SOILCARE Phase 2 to promote agroforestry and erosion control. Trinidad and Tobago's Disaster Measures Act (1978) focuses on emergency response, highlighting a gap in proactive land-based mitigation that CSIDS-SOILCARE Phase 2 could help address. Guyana's Amerindian Act (2006) requires FPIC for activities on communal lands, such as those in Kimbia, and the State Lands Act (1903) governs land allocation, which may delay rehabilitation unless coordinated. In The Bahamas, the Conservation and Protection of the Physical Landscape Act (1997) requires permits for vegetation removal, affecting restoration efforts in Grand Bahama. Saint Lucia's Physical Planning and Development Act (2001) mandates environmental impact assessments, making updated soil maps essential for justifying land rehabilitation. Antigua and Barbuda's Environmental Protection and Management Act (2019) enforces strict environmental standards, requiring CSIDS-SOILCARE Phase 2 to align closely with compliance protocols. Suriname's Forest Management Act (1992) regulates forest use and supports community involvement, guiding agroforestry efforts. Finally, Haiti's Rural Code (1962) governs agricultural land use and may pose challenges due to outdated provisions, requiring CSIDS-SOILCARE Phase 2 to adapt practices in rural zones affected by drought and erosion.

133. To address potential conflicts with national policies in CSIDS-SOILCARE Phase 2, the project will adopt a participatory and adaptive approach that emphasizes legal compliance, community engagement, and alignment with national priorities. In countries like Belize and Guyana, the FPIC procedure will be implemented through early and sustained dialogue with Indigenous Peoples and Local Communities. Community-led planning will be prioritized in areas like Dominica and Suriname, while legal compliance—including environmental assessments and permitting—will be ensured in countries such as The Bahamas, Saint Lucia, and Antigua and Barbuda. In Grenada and Trinidad and Tobago, CSIDS-SOILCARE Phase 2 will align with disaster risk reduction frameworks, while in Haiti, outdated legislation will be navigated through adaptive practices and policy engagement. Across all countries, stakeholder collaboration, capacity building, and continuous monitoring will be central to resolving conflicts and ensuring sustainable, locally supported outcomes.

Capacity Development

134. The project is strategically positioned to enhance human, institutional and technical capacities at national and local levels through the implementation of a comprehensive capacity development programme, coordinated by the PISLM RAC/NAT Facility. The programme will be structured to consider the lessons learned from CSIDS-SOILCARE Phase 1, including the findings of the initial capacity assessment and the emerging needs of the region.

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[27] GEF, 2022b. GEF-8 Programming Directions. GEF/R.08/17. Global Environment Facility, Washington D.C.

https://unfao-my.sharepoint.com/personal/neila_bobbprescott_fao_org/Documents/Climate%20Financing/SOILCARE/SOILCAREPLUS/PRODOC%20drafts/SOILCARE%20II%20_%20February%202025/Review%20Oct%202025/SOILCARE%202_October%202025%20-%20FOR%20UPLOAD/FULL%20PRODOC%20with%20annexes/SOILCARE%20Phase%202_Complete%20PRODOC_27Oct2025.docx - _ftnref1

[28] National Reference Laboratories are nominated by countries to be the reference for other laboratories in the country and to liaise with the CARSOLAN and the Global Soil Laboratory Network (GLOSOLAN)

[29] This may include measures such as proficiency testing exercises, interlaboratory comparisons, and implementation of strict operational protocols for calibration and verification of measurements.

[30] In that regard, a Resolution on the international exchange of soil samples for research purposes under GLOSOLAN was approved by the Global Soil Partnership 7th Plenary Assembly (https://www.fao.org/fileadmin/user_upload/GSP/GLOSOLAN/ne021en_24.pdf), and endorsed by the 27th Session of the FAO Committee on Agriculture (COAG) (https://openknowledge.fao.org/server/api/core/bitstreams/36116b93-6090-49b8-8847-2ff95ef3bf75/content), which can serve as baseline for this activity.

[31] the Agro-Ecological Zones (AEZ) modelling framework and databases. AEZ relies on well-established land evaluation principles to assess natural resources for finding suitable agricultural land utilization options. It identifies resource limitations and opportunities based on plant eco-physiological characteristics, climatic and edaphic requirements of crops and it uses these to evaluate suitability and production potentials for individual crop types under specific input and management conditions.

[32] The Protocol for the Assessment of Sustainable Soil Management is a tool for the evaluation of the effects of soil management practices based on the measurement of indicators of soil ecosystem services. https://www.fao.org/fileadmin/user_upload/GSP/SSM/SSM_Protocol_EN_006.pdf

[33] see FAO. 2018. Cost–benefit analysis for climate change adaptation policies and investments in the agriculture sectors. Rome, FAO. https://www.fao.org/3/I8905EN/i8905en.pdf and the tools in: https://www.fao.org/in-action/incentives-for-ecosystem-services/toolkit/assessment-and-valuation/en/

[34] The Global Soil Doctors Programme is a farmer-to-farmer training initiative that aims to build the capacity of farmers on soil health and sustainable soil management. The implementation of the Programme at the country level relies on the collaboration with a national promoting institution. The Programme's educational material consist of posters and field exercises, structured as learning modules, and fieldwork equipment. https://www.fao.org/global-soil-partnership/soil-doctors-programme/about-the-programme/en/

[35] See the Global Agroecological Zones webpage for details on the methodology at: https://gaez.fao.org/. The GAEZ data portal can be accessed here: https://data.apps.fao.org/gaez/?lang=en;

[36] The Climate-Smart Agriculture Compliant (C-SAC®) tool provides a guide to assigning values to qualitative parameters that are then translated into a numeric compliance scale of 5 major categories of compliance. https://csac.uwiclimatetools.tech/

[37] **GEF, 2022b. GEF-8 Programming Directions. GEF/R.08/17. Global Environment Facility, Washington D.C.**

. link

[38] **Stafford Smith, M., Ratner, B.D., Metternicht, G., Carr, E.R., Bierbaum, R., and Whaley, C. (2022). Achieving transformation through GEF investments. A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC**

[39] **Ibid.**