Part I: Project Information

GEF ID
10840

Project Type
MSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Strengthening access and benefit-sharing (ABS) policies and institutional frameworks through demonstrable models in Saint Lucia

Countries
St. Lucia

Agency(ies)
UNEP

Other Executing Partner(s)
IUCN

Executing Partner Type
GEF Agency

GEF Focal Area
Biodiversity

Sector

Taxonomy

Influencing models, Transform policy and regulatory environments, Demonstrate innovative approache, Strengthen institutional capacity and decision-making, Deploy innovative financial instruments, Stakeholders, Beneficiaries, Civil Society, Community Based Organization, Academia, Non-Governmental Organization, Communications, Education, Public Campaigns, Behavior change, Awareness Raising, Type of Engagement, Consultation, Participation, Information Dissemination, Partnership, Local Communities, Private Sector, Individuals/Entrepreneurs, SMEs, Focal Areas, Biodiversity, Supplementary Protocol to the CBD, Acess to Genetic Resources Benefit Sharing, Mainstreaming, Agriculture and agrobiodiversity, Species, Plant Genetic Resources, Animal Genetic Resources, Gender Equality, Gender results areas, Capacity Development, Access and control over natural resources, Knowledge Generation and Exchange, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Capacity, Knowledge and Research, Innovation, Learning, Theory of change, Knowledge Generation, Knowledge Exchange, Protected Areas and Landscapes, Community Based Natural Resource Mngt

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

Principal Objective 2

Land Degradation

No Contribution 0

Submission Date

1/14/2023

Expected Implementation Start

6/1/2023

Expected Completion Date

6/1/2027

Duration

48In Months

Agency Fee($)

151,414.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
BD-3-9	Further development of biodiversity policy and institutional frameworks through the Implementation of the Nagoya Protocol on Access and benefit sharing	GET	1,593,836.00	5,636,077.00
		Total Project Cost($)	**1,593,836.00**	**5,636,077.00**

B. Project description summary

Project Objective

To enhance the enabling environment to effectively implement the provisions of the Nagoya Protocol with a harmonized institutional and intersectoral approach as well as demonstrate replicable models for equitable and sustainable access and benefit sharing (ABS).

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 1: Strengthen the national policy and legislative institutional framework for operationalization of the Nagoya Protocol for access and benefit sharing (ABS)	Technical Assistance	**.1** Competent National Authorities and stakeholders adopt a policy and legislative framework for the fair and equitable sharing of benefits arising from the utilization of genetic resources. *Indicators: (i) Number of ABS policy positions policy adopted by the Government of Saint Lucia* *(ii) Multi agency committee with responsibility for ABS established and operational*	**1.1.1** Existing policy on ABS finalized and submitted to Cabinet for consideration and adoption **1.1.2** Draft Biodiversity Conservation and Sustainable Use Bill upgraded to include relevant ABS clauses and regulations to facilitate operationalization of the Nagoya Protocol for consideration by stakeholders and adoption by Cabinet	GET	124,607.00	970,421.00
		1.2 Competent National Authorities and stakeholders adopt an administrative framework to efficiently	**1.2.1** Agency operational framework and management recommendations prepared for administration of the ABS framework within scope of BCSU Bill for integration by			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
		operationalize ABS protocols nationally. *Indicators: (i) Number of adopted and actioned joint agency frameworks for ABS and biosafety by CNAs and other stakeholders* *(ii) Number of approved National ABS Protocols by CNA and stakeholders*	the CNAs and stakeholders within existing decision-making processes.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 2: Develop an effective permitting and monitoring framework for ABS protocols in accordance with provisions of the Nagoya Protocol	Technical Assistance	**2.1** Strengthened institutional capacities among CNAs to effectively operationalize provisions of the Nagoya Protocol. *Indicators:* (i) *Number of monitoring and permitting systems for ABS adopted by CNAs and stakeholders.* *(ii) Institutional capacity of at least 20 staff of CNAs, and other government institutions enhanced in applying ABS regulatory protocols*	**2.1.1** Administrative protocol for ABS Agreements (with PIC, MATs, templates for applications/ contracts, manual), monitoring and permitting system developed for research and bioprospecting activities available for use by CNAs and stakeholders. **2.1.2** Suite of capacity building tools and resources developed on administration of the national ABS frameworks for use by at least 20 professionals and CNAs and key stakeholders	GET	397,577.00	962,272.00
		2.2 National Environmental Information System provides functional capacity to	**2.2.1** Upgraded National Environmental Information System that			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
		serve CHM requirements for ABS protocols for use by CNAs and stakeholders. *Indicators: (i) Number of information platforms that fully incorporates CHM capability validated and meets requirements of CNAs and stakeholders*	includes an ABS CHM platform developed for use by CNAs and stakeholders.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 3 Establish demonstrable commodity pilots to test operationalization of ABS protocols toward sustainable management and equitable benefits of genetic resources and scale-up in future commercial application	Technical Assistance	**3.1** Formal ABS agreement between the GOSL and partners for contribution to sustainable use of the Saint Lucia Viper venom and demonstrated as a model for replication for other ABS applications. *Indicators: (i) Number of formalized partnerships between the GOSL and research development entity to grow opportunities for commercial and non-commercial bioprospecting.* *(ii) Number of Prior Informed Consent (PIC), Material Transfer Agreement and/or Mutually Agreed Terms (MAT) signed for use of the*	**3.1.1** Memorandum of Agreement on technical collaboration between the GOSL, the Kentucky Reptile Zoo or other partners and PIC and MAT agreements prepared on collaborative research and capacity building for bio-prospecting and institutional support related to potential use of venom of the Saint Lucia Viper. **3.1.2** Updated population assessment of the St Lucia Viper delivered to inform management approaches by the Forestry Department to facilitate sustainable resource use and enhance public safety.	GET	458,026.00	1,421,704.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
		Saint Lucia Viper venom *(iii) Number of professionals with capacity for diagnostic testing, handling and processing venom.*	**3.1.3** Exploratory research into the Saint Lucia Viper Venom and its potential for commercialization.			
		3.2 Enhanced business capacity for screening and commercialisation of genetic and bio-chemical compounds of biodiversity in Saint Lucia, in compliance with NP on sustainable utilisation of genetic resources. *Indicators: (i) Number of biological resources identified through genetic and/or chemicals screening towards potential commodity*	**3.2.1** Portfolio blue/green economic opportunities initiatives prepared using local biological resources that have high potential to benefit from ABS arrangements, to guide investment. **3.2.2** Chemical screening and testing on *Protium attenuatum* resin extracts conducted to ascertain the character of active ingredients to support community enterprise development.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
		(development for food, medical, cosmetic or other applications) *(ii) Number of small grant packages to eligible applicants.* *(iii) Number of plant germplasm banks*	**3.2.3** Grant mechanism piloted to support pilot gender-balanced community enterprises that will benefit from ABS arrangements. **3.2.4** Local network of medicinal germplasm banks to curate indigenous genetic resources established for use by communities.			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 4: Enhance Knowledge management on ABS to support decision making, stakeholder engagement and buy-in systems	Technical Assistance	**4.1** Heightened awareness among policy and technical stakeholders, NGOs and the public, on the provisions of the Nagoya Protocol and the associated national institutional and regulatory frameworks *Indicator: (i) % increase over baseline in the level of awareness among target beneficiaries measured through gender-disaggregated survey*	**4.1.1** Communications and outreach strategy prepared on ABS for adoption and integration within work of CNAs and NGOs **4.1.2** Suite of at least 10 knowledge products and public education material developed and distributed to relevant authorities, targeted audiences and the general public **4.1.3** Series of at least 10 knowledge sharing events convened for exchanging lessons learned, information dissemination and networking organized and facilitated for gender-balanced participation among policy	GET	468,732.00	1,719,565.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
			and technical support professionals, practitioners and other beneficiaries.			
			4.1.4 Project monitoring and evaluation system operating providing systematic information on progress in meeting project outcome and output targets.			
				Sub Total ($)	**1,448,942.00**	**5,073,962.00**

Project Management Cost (PMC)

GET	144,894.00	562,115.00
Sub Total($)	**144,894.00**	**562,115.00**
Total Project Cost($)	**1,593,836.00**	**5,636,077.00**

Please provide justification

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Education, Sustainable Development, Innovation, Science, Technology and Vocational Training	In-kind	Recurrent expenditures	1,079,040.00
Recipient Country Government	Ministry of Agriculture, Fisheries, Physical Planning, Natural Resources and Co-operatives	In-kind	Recurrent expenditures	2,243,346.00
Recipient Country Government	Attorney General?s Chambers	In-kind	Recurrent expenditures	237,699.00
Recipient Country Government	Department of Gender Affairs	In-kind	Recurrent expenditures	158,694.00
Recipient Country Government	Saint Lucia Bureau of Standards	In-kind	Recurrent expenditures	250,000.00
Other	Saint Lucia National Conservation Fund	In-kind	Recurrent expenditures	10,000.00
Other	Sir Arthur Lewis Community College	In-kind	Recurrent expenditures	92,593.00
Other	Saint Lucia National Trust	In-kind	Recurrent expenditures	29,630.00
Other	Organization of Eastern Caribbean States	In-kind	Recurrent expenditures	222,200.00
Donor Agency	International Union for the Conservation of Nature, Regional Office for Mexico, Central American and the Caribbean	In-kind	Recurrent expenditures	400,000.00
Other	Kentucky Reptile Zoo	In-kind	Recurrent expenditures	400,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Other	Clodomiro Picado Institute, University of Costa Rica	In-kind	Recurrent expenditures	300,000.00
Other	Fauna & Flora International	In-kind	Recurrent expenditures	82,000.00
Other	Inter-American Institute for Corporation on Agriculture	In-kind	Recurrent expenditures	24,625.00
Other	Caribbean Doctors Association	In-kind	Recurrent expenditures	106,250.00
			Total Co-Financing($)	**5,636,077.00**

Describe how any "Investment Mobilized" was identified

Not Applicable

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNEP	GET	St. Lucia	Biodiversity	BD STAR Allocation	1,593,836	151,414	1,745,250.00
			Total Grant Resources($)		**1,593,836.00**	**151,414.00**	**1,745,250.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

50,000

PPG Agency Fee ($)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNEP	GET	St. Lucia	Biodiversity	BD STAR Allocation	50,000	4,750	**54,750.00**
				Total Project Costs($)	**50,000.00**	**4,750.00**	**54,750.00**

Core Indicators

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)
0.00	14970.00	0.00	0.00

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	14,970.00		

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)

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

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

Indicator 4.5 Terrestrial OECMs supported

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

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

Title	Submitted

Indicator 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	600	600		
Male	500	500		
Total	1100	1100	0	0

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

Under Aichi Biodiversity target 16, the intention was that by 2015, countries would have operationalized the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, consistent with national legislation, backed up by the international regime on ABS that entered into force in 2010. Though we are past the target date, the project aims to ensure the full operationalization of the Nagoya Protocol in country through legislative and policy measures. Furthermore, the Zero Draft of the post 2020 Global Biodiversity Framework considers four long-term goals for 2050 of which Goal (c) seeks that the benefits, from the utilization of genetic resources, are shared fairly and equitably. The Framework lays out eight milestones against progress that will be assessed in 2030 towards the 2050 goals. The goal by 2030 is to ensure access and benefit-sharing mechanisms are established in all countries. In support of the Framework there are Action Targets where Target 12 proposes that by 2030, increase by [X] benefits shared for the conservation and sustainable use of biodiversity through ensuring access to and the fair and equitable sharing of benefits arising from utilization of genetic resources and associated traditional knowledge.

Part II. Project Justification

1a. Project Description

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

Genetic resources provide a wide range of products and services essential to human well-being. This is particularly notable in the pharmaceuticals, personal care and cosmetics, seed and crop protection, botanicals, and horticulture industries. Commercial uses of genetic resources include crop protection, drug development, chemicals, detergents, and textiles among others. A primary example is the development of drugs from the use of plant components, such as compounds found in resin and latex, to treat diseases, or the commercialization of a gene sequence from wild plants to increase the resistance of food crops to agricultural pests (SCBD, 2011)[1][1]. This makes genetic resources a high value commodity worldwide.

These genetic resources in the Caribbean, some of which are already being used in the pharmaceuticals and cosmetics industry[2][2], are under threat due to land degradation, climate change, pollution from nutrients, unsustainable use, and invasive alien species. The Nagoya Protocol offers the opportunity to make the best possible use of these genetic resources, generate and share benefits derived from their utilization, and return some of the revenue generated from these activities to the protection of the resources and the development of the countries where they were sourced.

Like other countries in the Caribbean, Saint Lucia is a tropical oceanic island located in the Eastern Caribbean Island chain and is 616 km2 in area. The island has rich and diverse terrestrial and aquatic biodiversity. It is documented to have 1,730 plant species 8 of which are endemic. Over four hundred and sixty-nine (469) plant species are used as food or ornamentals. The varied biodiversity is inclusive of 160 birds, an estimated 250 reef fish and 50 coral species on the island and within its territorial waters. In terms or terrestrial fauna, the island possesses high endemism, with some 14 endemic wildlife species including one of the rarest birds in the world, the Saint. Lucia Amazon (*Amazona versicolor*). This is typical of many small oceanic islands where their biodiversity evolves in relative isolation due to the physical barrier of the ocean, which results in islands often having highly adaptive species that are within a narrow genetic diversity, but with reduced competitive ability, small populations and narrow distribution range relative to continental systems[3]3. Island ecosystems are inherently vulnerable given the relatively close geographic proximities within small land spaces that can allow negative impacts of human disturbances to quickly propagate into and degrade ecosystems over space and time.

Over the years, Saint Lucia?s biodiversity has come under severe treats from several different manmade and natural activities. Saint Lucia?s landscape has undergone extensive modification over its history of colonization and development, with the establishment and exploitation of monoculture plantations in flat arable areas, along with conversion of other lands for settlement and other commercial activities. Between 1977 and 1989, 22.5% of the island?s forest was lost and it is estimated that 40% of the once thriving mangroves have been lost. In addition, over 12% of Saint Lucia?s beach resource is being mined for sand and 50% of the wetlands have been converted for cultivation, urban and commercial development. During the decades from the 1960s to the early 1990s, banana cultivation was responsible for conversion of large tracts of primary forest in the interior elevations to agricultural use, but with the downturn in the industry in the 1990s, many of these areas have been abandoned and are reverting to secondary woodland or otherwise converted to urban use. In addition to the direct pressure from land use change, invasive alien species, such as the green iguana (*Iguana iguana*), Giant African Snail (*Achatina fulica*) and fungal pathogens affecting agricultural biodiversity have also had significant impacts on biodiversity[4]4. Pollution is another major challenge that has had untold impacts on terrestrial, aquatic and marine biodiversity[5]5.

According to the Revised Second National Biodiversity Strategy and Action Plan (NBSAP) 2018-2025 for Saint Lucia, human influences have placed stress on several nationally endemic and regionally endemic species. In addition to the Saint. Lucia Amazon, the Saint Lucia Iguana (*Iguana cf iguana*), White-breasted Thrasher (*Ramphocinclus brachyurus*), Rufous Nightjar (*Caprimulgus rufus otiosus*), Saint. Lucia Oriole (*Icterus laudabilis*) and Saint. Lucia Black Finch (*Melanospiza richardsoni*) are vulnerable due to habitat fragmentation and low population numbers. Of high concern are the critically endangered Saint. Lucia Whiptail (*Cnemidophorus vanzoi*) and Saint. Lucia Racer (*Erythrolamprus ornatus*) that inhabit few of the offshore islands and nowhere else in the world, that could easily come to the brink of extinction under potentially catastrophic human impacts. The Saint Lucia pit viper (*Bothrops caribbaeus),* one of the species under consideration for this project, is currently listed on the IUCN?s red list as an endangered species.

There are at least ten plant species that are endemic to Saint Lucia, some of them rare with restrictive ranges. Floral population trends are not as well studied, however species such as Lowy? kann?l (*Aniba ramageana*), Lansan (*Protium attenuatum*), Gonmy? (*Dacryodes excelsa*), Small-leaved Mahogany (*Swietenia mahagoni*), Balata (*Manilkara bidentata*), Balata chyen (*Pouteria pallida*), Pencil cedar (*Juniperus barbadensis*), Latanny? (*Coccothrinax barbadensis*), Akoma (*Sideroxylon foetidissimum*) and Arkokwa (*Zanthoxylum flavum*) are of concern given that exploitation, land use change and forest conversions have reduced their numbers and distribution across the island. Some of the marine species restricted to the Caribbean that are known to be at risk include the Staghorn Coral (*Acropora cervicornis*),

Elkhorn Coral (*Acropora palmata*), Atlantic Goliath Grouper (*Epinephelus itajara*), Fire Coral (*Millepora striata*), Boulder Star Coral (*Montastraea annularis*) and Mountainous Star Coral (*Montastraea faveolate*).

Threats/Root Causes: Saint Lucia, as with many of its Caribbean neighbors, continues to face a myriad of challenges in respect to safeguarding biodiversity and ensuring appropriate protocols exist to facilitate and regulate sustainable access and equitable benefit sharing of its biological resources. The extent of bioprospecting without formal access and benefit-sharing (ABS) arrangements between the resource extractors and the resource custodians in the Caribbean and by extension in Saint Lucia, remains mostly unchecked. This means the enabling conditions and opportunities to repatriate benefits gained from successful ex-situ development of commercial derivatives from indigenous biodiversity (therapeutics, nutraceuticals and other medical products to treat human ailments etc.) are non-existent, with little recourse available to local biodiversity custodians to access benefits accrued from use of the resources.

There are also threats from climate change. Today, the multiple threats from climate change are becoming better understood in terms of impacts on biodiversity. Changes in temperature and moisture regimes will impact biochemical processes such as nutrient cycling, carbon sequestration and macrofaunal biological cycling, heighten fire risk, alter flowering and fruiting patterns in natural vegetation which in turn alters the food chains, affect reproductive cycles, and heighten proliferation of invasive species. All these impacts can generate ripple effects through ecosystems at all levels, that can in turn significantly compromise productivity and maintenance of flow of services and benefits. Climate change impacts in the marine environment is manifested in coral bleaching, more aggressive proliferation of harmful algal blooms and other chemical processes associated with warmer temperatures. Furthermore, increasing acidity of the ocean impairs coral growth and negatively impacts crustaceans. Wider spatial changes in ocean currents and salinity exerts additional impacts on marine biodiversity. These compounding threats have been documented in the Second NBSAP that calls for response measures to mitigate these risks. Threats to floral sustainability is also noted as lack of rainfall impacts the growth cycles of many species within various areas of Saint Lucia.

The compounding impacts of direct human disturbance on the natural environment, combined with the background threats of climate change will heighten vulnerability of the country?s biodiversity, particularly those species that are threatened or rare. In recent years it has been recognized that loss of ecosystems services as a result of degradation and climate change impacts will have long range detriment

not only in terms of loss of direct ecosystem service provisioning, but also in terms of loss of potential economic opportunity from use of biological resources in respect to development of derivatives and intellectual products based on traditional knowledge associated with the use of these resources.

To date, the true extent of historical removals of genetic resources from Saint Lucia is unknown. There are floral and faunal specimens in noteworthy collections in the Smithsonian Institution, Kew Gardens and the University of Rio Pedras, Puerto Rico. Some of these removals date back from the colonial days in previous centuries gathered from visiting scientific expeditions. In more recent times there have been authorized removals of native flora and fauna for research and conservation purposes, most notably under collaborations with the Durrell Wildlife Conservation Trust and the Association for the Conservation of Threatened Parrots for the Saint. Lucia Amazon, and with the Kentucky Reptile Zoo for the Saint. Lucia Viper. Additionally, there have been scientific exchanges with the University of Rio Pedras, Puerto Rico[6]6 in respect to identification and cataloguing of native flora. The National Herbarium housed at the Forestry Department contains 5,482 accessions specimens representing some 1,400 species. Although not tracked systematically, in recent years there has been a noted increase in formal requests for the extraction of genetic resources from the country. For example, in 2017, the Department of Sustainable Development received requests from research and commercial interests requesting permits to access species of algae and bacteria that are found in extreme ecosystems particularly the high-temperature volcanic fumaroles of the Soufriere volcano. More recently, the Forestry Department has received requests to study the Johnstone Whistling Frog (*Eleutherodactylus johnstonei*) from the Senckenberg Natural History Collections in Dresden, Germany, the result of this research is intended to strengthen the knowledge base for ongoing work on invasive alien species management. The approvals for recent requests for extractions have not been actioned given that necessary ABS mechanisms for negotiating and engaging these prospective resource users are not in place. However, request for marine research involving perception surveys, animal behavior and ecosystem health surveys are still being action at the fisheries department where three to six requests are fielded each year. Thus, there is an urgency to ensure the implementation of the appropriate legislative and institutional framework to facilitate sustainable access and equitable benefit sharing, where possible, from such interest in Saint Lucia.

The most notable example of active ex-situ use of a biological resource from Saint Lucia is that of the endemic Saint. Lucia Viper (*Bothrops caribbaeus*) which has drawn medical research attention based on active research on other *Bothrops* species[7]7 given the chemical composition of its venom that may have applications in first aid and emergency care. A recent report(2019) in the National Library of Medicine National Center for Biotechnology Information, suggest the family of *Bothrops* species has potential for antiparasitic and antibacterial properties.[8][8] Though there is currently no active investigation into the medicinal properties of the Saint Lucia viper, chemical tests completed by the Clodomiro Picado Institute of Costa Rica shows the venom of *the Bothrops caribbaeus* has a unique

characteristic that shows potential for further research into possibilities for use in the treatment of heart disease.

There is also interest in this venom for use in antivenom production. A memorandum of agreement (MOA) has been signed between the Government of Saint Lucia (through the Ministry of Fisheries, Physical Planning, Natural Resources and Cooperatives and Forests and Lands Resources Division) and the Caribbean Doctors Association (in Martinique) to explore the production of antivenom from the Saint Lucia Viper. This MOA was agreed for implementation between 2018-2022 with an aim to collaborate and carry out research on the development of antivenom for use in both countries for the *Bothrops caribbaeus*. The vision of that MOA is ?People co-existing with snakes in a safer environment, with benefits to all?. The objective of the MOA included a focus on research, training for the Forestry Department, venom extraction and analysis. The renewal of this agreement for the period 2022-2027 is to be actioned in December 2022.

Under a breeding loan agreement established in 2004 between the Saint Lucia Forestry Department and the Kentucky Reptile Zoo (KRZ), the KRZ is running a research and breeding program for the Saint. Lucia Viper. A number of individuals have been bred overseas through this initiative. Since 2019 the Government of Saint Lucia has had discussions with the Clodomiro Picado Institute of the University of Costa Rica on the possibility of developing antivenom from the *Bothrops caribbaeus* for future use in country. Though a formal agreement does not yet exist, it is anticipated that this partnership will be formalized during the lifetime of the project.

These potential benefits can only be realized, however, if the current threat to the viper is eliminated. Based on a 2009 assessment by Daltry[9]9 the estimated population is in declining trend and has been classified as endangered according to the IUCN Red List[10]10. Mapping of the historical range of the endemic viper in 2009[11][11] confirmed the threats posed to the population are real and include habitat modification, impacts from invasive alien species and direct human-wildlife conflict. The latter issue is seen as a critical threat since human-snake encounters leads to snake mortality in over 50% of the cases. Risk factors leading to an increase in snakebites is currently unknown but it is clear that local attitudes towards the species and the reaction to encounters with this viper are negative. Thus, the need for conservation action is a priority. However, updated information on populations and distribution to guide effective management measures to mitigate adverse impacts from human encounters as well as targeted conservation measures is severely lacking.

As with the fauna, the potential economic value of extracts from indigenous floral species has been attracting interest for commercial use from external parties. One of these is a rainforest tree *Protium attenuatum* known locally as ?lansan?[12]12, which has a very restricted global range, being endemic to five islands in the Eastern Caribbean including Saint Lucia. It is classified as endangered according to the IUCN Red List[13]13. Populations once found in Saint Kitts and Nevis and Saint Vincent and the Grenadines have now disappeared and those found in Dominica and Martinique are under severe stress[14][14]. The resin of the lansan tree has been traditionally tapped in a local artisanal industry for use as incense for local religious ceremonies, and the dried resin extracts has had a longstanding export market in neighboring Martinique. Similar trees with potential for frankincense production in the middle east has been used commercially thus showing the commercial potential of this particular species of tree. The chemical and aromatic properties of the resin have been attracting recent external commercial interest for applications in the development of other value-added products particularly in the production of body creams and insect repellents. It is of interest that a closely related species *Protium heptaphyllum* that occurs in South America has been recognized to have useful medical applications as an analgesic and anti-inflammatory agent as presented in the scientific article by de Lima et al (2016) published by Pharmacognosy Magazine[15]15. Like the viper, the lansan has come under threat as indiscriminate tapping of the trees for resin, over exploitation and other pressures have led to the death of many mature trees, severely depleting the populations in Saint Lucia[16][16]. Quantifiable data on the extent of the damage is lacking but the Forestry Department has indicated ?the high mortality rate of *Protium attenuatum* trees, due to over harvesting of lansan is a major challenge?[17][17], Up to 60% of the trees tapped in the traditional manner eventually die from disease or breaking. This challenge is exacerbated not just from over exploitation but by deaths caused when untapped trees become diseased as a result of the damage to the older trees through these indiscriminate tapping methods. To address the problem, in 2018 a study completed by Fauna and Flora International in collaboration with the Saint Lucia Forestry Department, revealed a new tapping method debuted in 2016 proved equality productive as the traditional tapping methods used to harvest the resin but the trees remained healthier with less signs of disease or decay. As a result, the Saint Lucia Forest Department has been working throughout the last few years on effecting better management of the trees and sustainable harvesting of the valuable resin they produce. In 2018 a management plan was developed, and a training program implemented for licensed harvesters. But there is need to complete critical mapping of the areas with lansan as well as develop germplasm banks and conduct public awareness activities to ensure the longevity of the species.

Overall, the long-term problem is that Saint Lucia has not developed the required policy enabling environment and the associated on-ground management responses to safeguard and possibly sustainably scale-up potential economic benefits from the use of the Saint. Lucia Viper and the Lansan tree. These are two endangered species of global significance that may be used to test models for ABS application,

that can provide additional ecosystem service value underpinnings to ongoing conservation management measures already in place in the country.

To address this deficiency, Saint Lucia has taken important steps to strengthen the enabling policy environments and capacity, to gain alignment with the provisions of the Nagoya Protocol on access and benefit sharing to further safeguard its biological resources and ecosystems. These efforts have been supported under the recently concluded regional UNEP GEF-funded initiative, *Advancing the Nagoya protocol in countries of the Caribbean Region* in partnership with IUCN. Saint Lucia is now a party to the Nagoya Protocol on Access and Benefit-sharing, having recently deposited their instrument of accession to the protocol on February 11th 2022 with effect from July 12th 2022. In preparation for implementation of the protocol, Saint Lucia has developed a draft ABS policy along with draft legislative provisions on ABS to be included in the current draft bill on biodiversity use and conservation. Additionally, draft agreement templates have been developed to facilitate terms and conditions of access to genetic resources. Notwithstanding the progress Saint Lucia has made in advancing development of an ABS framework at the national level, significant work still needs to be undertaken to realize appropriate policy alignment and management requirements in respect of the provisions of the Nagoya Protocol.

Barriers: The project seeks to address the problem of loss of key globally threatened biodiversity in the country and consequent loss of potential economic benefits to custodian communities, and the nation at the broader level. This will be achieved through the creation of a sound enabling environment to facilitate equitable access of benefits derived from use of native genetic resources, through the introduction of policy and management responses including fostering entrepreneurial opportunities that can benefit from ABS arrangements. As a small island developing state, the country is resource-constrained in terms of human, institutional and financial resource availability, hence an effective harmonized inter-sectoral approach in implementing the provisions of the Nagoya Protocol that draws on opportunities for organizational and stakeholder engagement efficiency is critical. In this regard the following four key barriers need to be addressed:

Barrier 1: Inadequate national policy and legislative institutional framework for operationalization of the provisions of the Nagoya Protocol for access and benefit sharing. Unlike the Cartagena Protocol (which was ratified in 2005), the country has only recently acceded to the Nagoya Protocol. Thus, there

is much to be done to ensure commitment of stakeholder investment to move the implementation process forward. The main challenge in advancing the Nagoya Protocol in Saint Lucia, is a deficiency in the appropriate enabling environment. There does not exist a functional regulatory and operative systems that integrates existing policies and laws that facilitates provisions of the Protocol. In 2008 a draft Biodiversity Conservation and Sustainable Use Bill (BCSU Bill) was prepared to enhance implementation of national obligations under the Convention on Biological Diversity in realization of the country?s biodiversity conservation goals. The Bill includes some clauses on access and benefit sharing, however there is need for further enhancement and an upgrade of the Bill to improve operational and regulatory synergies to ensure effectiveness of implementation of this draft legislation. The Bill still requires additional information on regulations for access and the outline of benefits that need to be shared with the country should genetic materials with commercial possibilities be identified. The Bill also needs to be upgraded to include formal arrangements for the operation of CNAs across the various permitting agencies. Additionally, the existing legislations governing operations of other agencies with overlapping functions, have to be assessed and relevant clauses included in the BCSU Bill to eliminate any duplication of responsibilities or functions. Furthermore, there is need for an operational policy on ABS for the island. Though a draft policy exists, it requires an upgrade for submission to the Cabinet of Saint Lucia for approval.

Saint Lucia, like most small island developing states remains challenged by its relatively limited institutional capacity to service national commitments and obligations made at the global level to conserve biodiversity, amidst all other national development imperatives, which constitutes a significant barrier. This challenge applies similarly to implementation of the provisions associated with the Nagoya Protocol. Although the country has made gains in enhancing operational efficiency and inter-agency coordination in decision making and taking relevant action related to commitments, further guidance is needed to assist competent national authorities (CNAs) to internalize required processes and establish operational protocols that will not result in additional administrative burden. Ultimately, the lack of well-defined administrative protocols to build effective coordination among agencies for review and consideration of permit requests for use of genetic resources presents a constraint in facilitating investment by prospective collaborators in developing opportunities in the context of benefit sharing. Challenges exist primarily as there are different agencies responsible for the approval of research permits, however the capacity to integrate and standardize administrative processes within and across agencies is lacking. Many of the agencies are also not familiar with the requirements of the Nagoya Protocol and have not made provisions for incorporating benefit sharing provisions in the permitting systems currently in place.

Barrier 2: Absence of a permitting and monitoring framework for ABS in accordance with provisions of the Nagoya Protocol. This constitutes a critical barrier to the readiness of the country to implement the framework of the Protocol. While there is some technical capacity within the agencies that will serve the role of CNAs, this needs to be augmented by specialist knowledge and information on the specific technical requirements of the Nagoya Protocol. Under the regional ABS project, agencies were introduced to the data collection requirements and monitoring protocols, but these were not fully

developed to be operationalized at the national level. The fact that several agencies are involved in the permitting process to access resources in Saint Lucia complicates matters as awareness and communication among these agencies is not effective. Awareness of ABS issues is critical for an agency such as the Folk Research Center given its mandate for example, however this agency revealed ABS considerations have not been taken into account as part of the permission system in place for persons accessing traditional knowledge related to the use of on various genetic materials. In fact, the organization was not aware of these issues, the potential benefits or cost associated with a lack of proper ABS permission process.

There is no mechanism to monitor ongoing research and development using native genetic resources and associated traditional knowledge, or commercialization of derivatives, either at the individual agency level or at the cross sectoral level. There have been past collaborations with research entities in use of the country?s genetic resources, but the arrangements have been substantially informal, without specific terms of agreement to secure a pathway for sustainable repatriation of benefits to the country. Although under the regional ABS Project, stakeholders gained some level of exposure to the concepts of prior informed consent (PIC) and mutually agreed terms (MAT) as part of ABS agreement negotiation, there remains limited capacity to negotiate such agreements with prospective resource users. Additionally, there is currently no protection of the rights of custodians in terms of traditional knowledge associated with use of native genetic resources in Saint Lucia. The cumulative result is that there are no national protocols for submitting applications, reporting and enforcing compliance with benefit-sharing agreements within the context of PIC and inclusive of MAT for transfer of genetic resource.

Critical to effective management of the ABS framework is continued investment in capacity building of personnel within designated CNAs in implementation of decision-making systems, monitoring and data collection and negotiation for PIC and MAT. The regional GEF ABS project targeted a broad range of relevant stakeholders within a series of capacity building activities in which they were exposed to standard processes, tools and methodologies in accordance with best international practice. However, the discussions across the various permitting agencies show there is still need for more capacity building on the requirements and provisions of the Nagoya Protocol. Many of the agencies continue to lack full understanding of the protocol and implications of the protocol within their work programs. There is need to improve the capacity of each permitting agency and close the gaps among relevant pieces of legislation to ensure a comprehensive and sustainable ABS management framework is established in Saint Lucia.

Another challenge that needs to be addressed is the availability of requisite data, relevant templates, and other administrative information to facilitate permitting, and monitoring processes associated with both frameworks, within easily accessible data clearinghouse mechanisms. Currently, information is not easily available to inform decision making to support negotiations in respect of access to genetic resources. Furthermore, with the number of agencies involved in granting permits for access to genetic material, it is impossible in this ad-hoc environment to determine whether proper ABS procedures are

being followed. Thus, the ABS information clearinghouse mechanism (CHM) needs to be further developed from the initial contributions of the regional project, to be hosted within the National Environmental Information System (NEIS) that will serve as the central hub or gateway for the ABS CHM. Presently, there is need to research information on in-situ and ex-situ collections of biological resources from Saint Lucia however the data to determine the location of ex-situ resources in particular is non-existent to minimal at best. The lack of information on possible ex-situ resources for Saint Lucia, that could be placed in the CHM is a serious challenge for the country. The resources to conduct research of scientific journals, review of the various agencies and the possible biological resources they may have allowed access to, is unavailable. The NEIS and the monitoring/permitting system to be established under this project can help to address this data shortage and ensure such mistakes and the unavailability of data in the past, are not repeated in the future.

Barrier 3: Lack of demonstrable commodity pilots to test operationalization of ABS protocols toward sustainable management of indigenous genetic resources and scale-up in future commercial application. Saint Lucia has limited capability at this point to effectively negotiate ABS agreements and otherwise ensure that research and development processes by commercial and research interests toward commercialized use of the country?s genetic resources are being done in a manner that return equitable benefits to the country. No national system exists to monitor ongoing research and development with Saint Lucian genetic resources and associated traditional knowledge or commercialization of developed products. This need has been accepted to be necessary given the fact that there is already use of native genetic resources that has entered non-commercial application. Of note is the harvesting of the venom from the Saint. Lucia Viper through an agreement between the Forestry Department and the Kentucky Reptile Zoo, the Clodomiro Picado Research Institute of Costa Rica and the Caribbean Doctors Association. However, these agreements need to be upgraded with ABS considerations that builds in transparent agreed terms related to any possible long-term benefit-sharing through defined PIC and MAT. While there is recognized possibilities for commercial applications in use of the Saint. Lucia Viper venom, the level of enterprise development is currently unclear. This requires further exploratory research. However, there is a lack of technical capacity of professionals in technical topics such as chemical analyses and protocols for venom extraction. Needed guidelines and research expertise are locally lacking but such expertise resides externally. The country will need to strengthen collaboration with external partners to undertake further research on the viability of the venom as well as facilitate knowledge transfer on the assessment and any discovered importance of the venom to local professionals.

There are also other genetic resources that are already being bio-prospected that hold potential for consideration under ABS regimes. But these are yet to be officially explored to determine real commercial viability. Locally, there are several plants and non-timber products that are currently being used for medicinal and ornamental or cosmetic purposes. Herbal practitioners utilize several plants such as the Spanish needle (*Bidens Pilosa*) for medicinal purposes and several cottage industries have developed around the use of other non-timber species like the Bay leaf tree (*Pimenta racemosa)*.

With respect to bio-prospecting and sustainable use of genetic resources, cost-benefits are poorly understood and researched, creating a barrier to efforts to explore, tap into or develop potential local enterprises around local biodiversity that could otherwise be supported by the development of locally based financial incentives and locally based research and development. The result of this limitation will be loss of potential economic opportunities that could be accrued from ABS arrangements by beneficiary communities and stakeholders who serve roles as custodians and users of the resource. This in turn means that there will be limited business development support to provide stimulus to private enterprise development with ABS considerations given that there has not been the means to analyze and develop appropriate business models that can be applied. Under the regional ABS Project one of the outputs was the *Development of a Business Model for ABS in the Caribbean Region*[18]18*,* which outlined the process for formulation of business models for commodities with favorable development potential. The publication featured two case scenarios based on commodities in Jamaica and Saint. Kitts & Nevis, along with profiles for the countries under the scope of the project. Since a profile of ABS commercial opportunities is yet to be developed for Saint Lucia, and there is no portfolio available that may provide the basis for development of potential opportunities to guide investments, this business development model will be used to help complete the portfolio of blue/green economic activities envisioned under activity 3.2.1. In terms of traditional knowledge (TK), it is noted that TK on use of local biodiversity is extensive but that has not been tapped to its full potential particularly for food security and medicinal purposes and other functional use, to yield full economic opportunities. However, there are a number of persons involved in herbal medicine that have knowledge of herbs and their uses that could lead to development of viable commercialization of flora and fauna currently used in traditional medicines.

There is a lack of ability within communities (and organizations that represent them), who are considered custodians of biodiversity and associated genetic resources, to adequately ensure safeguards and transfer of benefits associated with use of traditional knowledge are accorded to these communities. Related, there is a gap in terms of access to small-scale funding by local communities and small enterprises to apply traditional knowledge in use of genetic resources to scaled, sustainable commercial applications, facilitated by demonstrable ABS models. The GEF Small Grants Programme has made some investments in sustainable livelihood ventures such as apiculture, eco-tourism and green product development and the Saint Lucia National Conservation Fund (SLUNCF), established in 2016 to support conservation financing has the potential to address this gap. It is noted however that the framework to integrate ABS within prospective community-based investments currently does not exist. Lending agencies, outside of the GEF small grants program are not presently aware of the potential benefits from ABS related investments. Many of the business community entities were not aware of the concerns surrounding illegal access to genetic resources or the potential economic benefits to them. Thus there has not been a large or medium-scale effort to invest in such industries or undertakings.

Barrier 4: Weak state of knowledge on ABS to support decision making, stakeholder engagement and buy-in. The regional GEF ABS project contributed to raising awareness among designated CNAs and

stakeholders, but these efforts need to be expanded to help movement toward operationalization of the framework. There remains a general lack of awareness across all levels of the governance spectrum, from policy makers to communities, on the potential advantage to be gained by application of ABS protocols. This also applies to recognizing the importance of safeguarding of traditional knowledge in securing economic returns to communities that possess custodian responsibilities of genetic resources. This in turn limits the ability to respond in an informed manner to requests from research and commercial partners for access to genetic resources and traditional knowledge, including their rights and responsibilities that may be potentially beneficial. The extent of this barrier is evidenced by the fact that although Saint Lucia has recently acceded to the Nagoya Protocol in July 2022, many stakeholders remained unaware of this development and were not fully aware of what the Nagoya Protocol means for the country. The implementation of the Nagoya Protocol by Saint Lucia will benefit from expanding the awareness raising effort commenced under the regional project. There is no clear integrated strategy and communications plan to pull together ABS strategic directions and as such, an appreciation for the value of a holistic approach in managing the ABS framework within the wider national biodiversity management environment is not apparent among stakeholders. The complexities of the subject matter and the need for buy-in requires that appropriate messaging is crafted and delivered to respective audiences on a continuous basis.

2. Baseline scenario and associated baseline projects

As party to the CBD, and having recently acceded to the Nagoya Protocol, in July 2022, Saint Lucia has sought and is working towards systematically integrating the requirements of the Nagoya Protocol into its national policy and operational framework. Having participated in previous projects relevant to ABS within the Caribbean region, the country has made some strides in developing the necessary framework to ensure sustainable management of ABS issues nationally. It is noted that Saint Lucia has some level of legislative, policy or strategic systems that indirectly address access to biological resources. Under the baseline scenario it is noted that the frontline agencies with responsibility for biodiversity management include the Forestry and Fisheries Department, who maintains on-the-ground resource management as specified in their respective legal mandates, the Forest, Soil and Water Conservation Act (1946, amended 2008), the Wildlife Protection Act (1980), the Fisheries Act (1984) and Regulations. In accordance with the provisions of the laws and regulations, for ?non-agricultural? biological resources, the Fisheries Department and the Forestry Departments are responsible for handling requests and issuing permits to access, study, use or transport of biological and genetic resources from marine and terrestrial environments although under the baseline it can be expected that the protocols are poorly defined in the context of ensuring that ABS considerations are adequately taken into account. Related, both Forestry and Fisheries Departments are CITES management authorities with responsibility for regulation of movement of biodiversity that falls within the designated schedules under the Convention. The International Trade in Wild Fauna & Flora Act (2007) has been developed but remains in draft while regulations to support implementation of the Act are being developed.

In the monitoring and regulation of movement of genetic resources into and out of the country, the above-mentioned primary agencies work along with other agencies namely the Customs and Excise Department, the Saint Lucia Air and Sea Ports Authority, the Ministry of Health, the Saint Lucia Bureau of Standards among others, in regulatory, policy and advisory contexts. The Department of Sustainable Department serves in a policy coordinating role on biodiversity and has key responsibility in guiding stakeholder engagement in the realization of the NBSAP as an overall guiding policy instrument for the country. This role will remain a prominent one that will continue as a baseline for the project as their mandate includes the integration of ABS considerations as part of the DSD work program, although without the GEF contributions, the process may remain low keyed and likely delayed.

Under the current baseline scenario, the Saint Lucia National Trust plays a key role in raising public awareness on biodiversity assets and support and engage with partner organizations in advancing conservation oriented toward empowerment of communities and the public. The Folk Research Centre has played a critical role in documenting national cultural heritage; some of this work has included traditional knowledge associated with use of natural assets, a role that will continue throughout the project. The Department of Social Equity will also play a potential support role in areas related to local communities and traditional knowledge.

There is some degree of institutional overlap and conflict as well as gaps in policy and technical execution among relevant agencies. To address these challenges, with recognition of the need for greater synergy and coherence in policy and implementation, there has been an attempt to coordinate the biodiversity management agenda to enhance planning and decision-making and realize effectiveness in execution of mandates. In this regard, a National Biodiversity Steering Committee has been convened to address coordination across the agencies. This committee will form the basis for the project coordination committee. In a further step, the country has sought to deepen integration across multiple sectors within a legislative setting through the formulation of a draft *Biodiversity Conservation and Sustainable Use Bill (BCSU Bill, 2009)* which is intended to be an ?omnibus? measure to cover the entire range of biodiversity issues including those identified within the CBD and its associated Protocols. This Bill, as mentioned in paragraph 30 above, will be updated with ABS clauses as well as outline the institutional arrangements, and considerations of ABS into the provisions of the legislation. The current draft provisions, which include clauses for accessing and benefiting from genetic resources, institutional arrangements for management of the Nagoya Protocols for and monitoring of any subsequent ABS agreements, were developed in conjunction with the Sustainable Development department as well as the Attorney General?s chambers under the completed GEF-funded UNEP-IUCN project *Advancing the Nagoya Protocol in countries of the Caribbean Region*. Under this proposed project, it is envisioned that these clauses will be processed through a final review, to ensure the most up to date information is included and incorporated into the relevant sections of the BCSU Bill. The upgrades will include the administrative framework for managing access to genetic resources through permitting based on mutually agreed terms for use, prior informed consent from affected stakeholders, and taking into account provision of benefits associated with any use of traditional knowledge. The legislation designates the Department of Sustainable Development (DSD) as the Competent National Authority with a mandate to

appoint Permitting Authorities. Furthermore, the legislation makes provisions for an ABS Funding Window under the Saint Lucia National Conservation Fund, a provision that will further sustain the achievements of the project envisioned under activity 3.2.1. Once the upgrades are completed, the BCSU Bill will go through a final review on commencement of the project and there after submitted for Parliamentary consideration.

As part of the work already completed, templates have been designed so research parties can request permission to access genetic resources electronically, and agreement templates have also been developed to clarify the terms of the permission. These templates remain in draft and need to be agreed upon and finalized during this project. How they will be incorporated into the NEIS also remain an outstanding issue to be addressed under this project. National-level execution of GEF funded UNEP-IUCN ABS project was accompanied by extensive national awareness-raising. The project also contributed to the development of an ABS Caribbean website at http://www.abscaribbean.com/about/nagoya-protocol that included national pages; Saint Lucia?s page is at http://www.abscaribbean.com/about/partner-countries/saint-lucia with the intention of being linked to the National Environmental Information System mentioned in paragraph 35. This ABS Caribbean website is currently in the process of being migrated to the Secretariat of the OECS? website to ensure its sustainability. This regional project also introduced the need for a monitoring framework that would enable notification to CNAs when genetic resources from the Caribbean were referenced in studies, entered in catalogues/museums or used in commercial development.

The GIZ Initiative ABS Caribbean Work Program, continued with some of the work commenced under the GEF UNEP-IUCN *Advancing the Nagoya Protocol in Countries of the Caribbean* project. The GIZ continued to work on two primary areas from this initiative. These areas included a focus in the first phase on the adoption of regional guidelines for ABS in the OECS region and more recently in the second phase, the development of a regional permitting system for ABS. Through this project, at the 8th meeting of the Council of Ministers of the Environment (COMES), Saint Lucia and a number of OECS governments agreed to, and adopted a series of guidelines for the implementation of ABS related policy and legislation in relation to the Nagoya Protocol within all OECS countries. Under the second phase, which ended in July 2022, the ministers took note at COMES 9 that the OECS countries have agreed to continue exploring the possibility of sourcing funds to implement a regional permitting system to be hosted at the OECS Secretariat and accessible to all Member States. The proposed regional permitting system will seek to ensure a uniform system is in place for the accessing of genetic resources and the sharing of their resulting benefits. To this end, the GIZ is currently working with the OECS and the CARICOM Secretariats to formulate a project the seeks to actualize this regional permitting system. Should this project be approved (anticipated in 2023), Saint Lucia aims to capitalize on the potential synergies to ensure complete operationalization of an electronic permitting system for the country with regards to accessing and sharing the benefits of genetic resources. Such synergies would include benefitting from shared information from other countries and notification from those countries of bioprospecting activities in the region.

The OECS Biospace Project: Under this current ACP Small Island Developing States (SIDS) project, the OECS Commission is implementing several activities aimed at protecting the region?s coastal and terrestrial biodiversity. The Support Program was developed to contribute to the sustainable development of ACP Small Island Developing States (SIDS) and coastal countries, while at the same time supporting

efforts towards achieving the Sustainable Development Goals (SDGs) [19][19]. The program aims to contribute to the implementation of the SAMOA Pathway by supporting and improving the management and sustainable use of coastal and marine resources. The main expected results of the Program are: Result 1 - Capacities of ACP regions and countries to effectively manage coastal and marine biodiversity and enhance resilience to climate change are strengthened; Result 2 - Regional, national and local efforts to assess, protect, manage and sustainably use marine and terrestrial biodiversity are supported; Result 3 - Partnerships for environmental sustainability are developed and strengthened. The OECS Commission is responsible for executing results 1 and 2 in the Caribbean Region. In terms of relevance to the current project being implemented by the GOSL, part of the OECS project includes the establishment of formal research protocols that can be used as guidelines for OECS countries in ensuring effective monitoring and access, as well as benefit sharing of biodiversity being accessed for research purposes.

Existing Research Initiatives: Under independent research and partially supported under CBD Biodiversity Enabling Activities (2005) and the European Union Special Framework of Assistance (SFA) 2003[20]20 allocation, R. Graveson has assembled a comprehensive online database of the Plants of Saint Lucia accessible at http://saintlucianplants.com/ which for all intents and purposes represents the most comprehensive online database of the plant genetic resources of the country. In the early to mid-1990s with the support of the Canadian Government through the Canadian International Development Agency (CIDA) under the *Forest Management Project*, the Forestry Department developed and maintained a herbarium within its headquarters, which remains a viable source of genetic research used by secondary and tertiary school students, local and regional researchers. Under the European Union SFA 2003 grant to the *National Forest Demarcation and Bio-Physical Resource Inventory Project* the Forestry Department carried out assessments of mammals by Clarke[21]21 and reptiles and amphibians carried out by Daltry[22]22. The Forestry Department maintains an active programme of surveillance and monitoring of the state of forest resources within government forest reserves that extends to extraction of biological resources under the provisions of the Forest, Soils and Water Conservation Act. However, it has limited jurisdiction over private lands in terms of enforcement powers related to removal of biological resources granted under the Act. The Wildlife Protection Act provides a more comprehensive degree of enforcement authority to management of fauna over both State and non-State lands. Under the Fisheries Act there are regulatory controls over extraction of marine biodiversity. The primary mechanism for monitoring are the fish landing assessments that are carried out at the various fish landing locations across the island.

The *Program of Applied Research to Popular Medicine in the Caribbean (TRAMIL)*[23]23 is a community of researchers, ethnobotanists, biologists, traditional medicine practitioners and medical experts in the Caribbean that bring together knowledge from across the region gathered from

ethnopharmacological surveys of native plants into medical applications. TRAMIL aims to validate scientifically the traditional uses of medicinal plants for primary health care with a vision to be the reference interdisciplinary program in the detection, validation and diffusion of the uses of medicinal plants that impact in public health. From investigations compiled in the regional pharmacopoeia there is strong interest among experts involved in the community to explore the possibility of securing ABS frameworks for species with potential for commercial use within the Caribbean, including in Saint Lucia. There has been continuous work in this area since 1982. Possibilities to collaborate on potential uses of medicinal plants found in Saint Lucia as part of the pilot projects will be explored further during the project.

Since 2010 Fauna and Flora International (FFI) has been assisting the Forestry Department in provision of technical and financial support to address destructive tapping practices to harvest resin from the regionally endemic and locally threatened forest tree *Protium attenuatum*, known locally as lansan. The tapping methods as currently practiced are extremely destructive to the trees and increase the likelihood of premature death. The collaboration, along with Durrell Wildlife Conservation Trust has led to a more sustainable method for tapping that not only minimizes damage to the tree but also yields more resin. Resin tappers are now being trained in the new, safe extraction method and are being licensed to harvest the resin from areas designated by the Forestry Department. In the FFI collaboration, four tappers, tapping over four hundred trees, were trained in the new method and monitored over the period of a year to determine the impact the new harvesting method of harvesting had on the trees and the production of resin. The success of the project has led to the development of a draft management plan for the lansan with guidelines on harvesting of resin. The management plan needs to be finalized however and the measures for monitoring and management fully implemented to ensure sustainability of this tree species and the sustainable livelihood activities currently associated with it. Though the number of persons involved directly or indirectly in the tapping of lansan is unknown, the Forestry Department indicates the industry associated with the collection of lansan resin facilitates income for a number of individuals primarily from rural areas of Saint Lucia where banana production is no longer a viable income source[24][24]. Under a more sustainable management regime there is potential to create more jobs from this renewable resource by marketing Saint Lucian frankincense candles, toiletries and other products. Over 60% of Saint Lucians are believed to use lansan derivatives at home[25][25]. Based on the use, value of the resin[26][26] through its various derivatives and potential applications in the nutraceutical and pharmaceutical industries, the species is of active interest by the GOSL to make subject to an ABS regime that will assure greater benefit derived from value-added enterprise development to local communities.

Based on recurrent annual estimates the Government of Saint Lucia invests approximately US$220,000 annually that may be considered direct contribution to the baseline related to the enabling environment to support ABS under the Nagoya Protocol. This includes support to ongoing recurrent activities within

the Forestry Department related to monitoring and patrolling forest reserves and adjacent forest areas to mitigate unsustainable incense harvesting and forest degradation and monitoring Saint Lucia Viper occurrence and assisting communities with reducing adverse human-wildlife interactions, along with investments in ongoing conservation education program. These resources will support the efforts of the Department of Sustainable Development to coordinate and host multi-stakeholder dialogue in support for implementation of the NBSAP related to ABS considerations. Under the recurrent budget program, agencies including the Department of Agriculture and the Ministry of Commerce will continue to support beneficiary communities in development of capacity for investing in alternative livelihood options.

3. Proposed alternative scenario with a brief description of expected outcomes and components of the project

Project Overview: The GEF?s incremental funding and the leveraged co-financing resources will be used to overcome the identified barriers to creation of the needed enabling environment to pave the way for Saint Lucia?s implementation of the Nagoya Protocol. It also aims to create the avenues for effective stakeholder participation in decision making and realization of economic benefits, particularly associated with the value-added commercial applications frm the use of native genetic resources. In July 2022 Saint Lucia acceded to the Nagoya Protocol and now seeks to undertake the remaining critical work that must be done to establish a robust policy and operational environment to execute the provisions of the Protocol.

The project consists of four (4) components and eight (7) outcomes as described below. Corresponding indicators and targets are fully developed in Annex A ? Project Results Framework, and the project?s detailed work plan and benchmarks are presented in Annex I and J, respectively. Investment under **Component 1** will realize the outcome of a strengthened national policy and legislative institutional framework for operationalization of the Nagoya Protocol for access and benefit sharing (ABS). Investment under **Component 2** will realize an effective permitting and monitoring framework and strengthened capacities for ABS regulatory operationalization in accordance with provisions of the Nagoya Protocol. This will be supported by an interactive data support platform for use by CNAs and

clients that is part of an existing data management system that will provide functional capacity to serve clearinghouse mechanism (CHM) requirements for the ABS framework. Investment under **Component 3** will contribute to commodity pilots to test operationalization of ABS protocols toward sustainable management of Saint Lucia?s genetic resources. In addition to other potential resources that will be investigated, two indigenous genetic resources already being used, will be assessed to determine possibilities for future commercial application. These two pilots will be based on (1) further review of the venom of the endemic Saint Lucia Viper (*Bothrops caribbaeus*) to determine its potential for medical applications and (2) use of resinous extracts of the regionally endemic Lansan tree (*Protium attenuatum*) in the nutraceutical industry. Where applicable, this will be based on the formalization of ABS agreements with research and commercial entities that are developing value-added product applications from these biodiversity resources. Capacity enhancement and enterprise opportunities for local professional and local communities will be enhanced based on these cooperative ABS agreements with partners that will serve as demonstration models for replication. Investment under **Component 4** will enhance overall knowledge management to support decision making, stakeholder engagement and buy-in to recognition of the potential opportunities for sustainable management and use of native genetic resources, and the need to ensure that benefits accrued are repatriated to the country and communities. It will also focus on awareness of the relevant stakeholders and the general public on the importance of genetic resources and the impact of biopiracy. The project will take advantage of the opportunity to demonstrate options for green recovery and economic development in the wake of the COVID19 pandemic. This is particularly in the context of socio-economic opportunities in development of commodities derived from native biodiversity. These will have the added security of being underpinned by safeguards afforded through ABS agreements with partners that have the means to scale up to larger enterprise levels where the benefits can be equitably repatriated to local communities. The project Theory of Change is illustrated in Figure 1 below and the project components described in more detail.

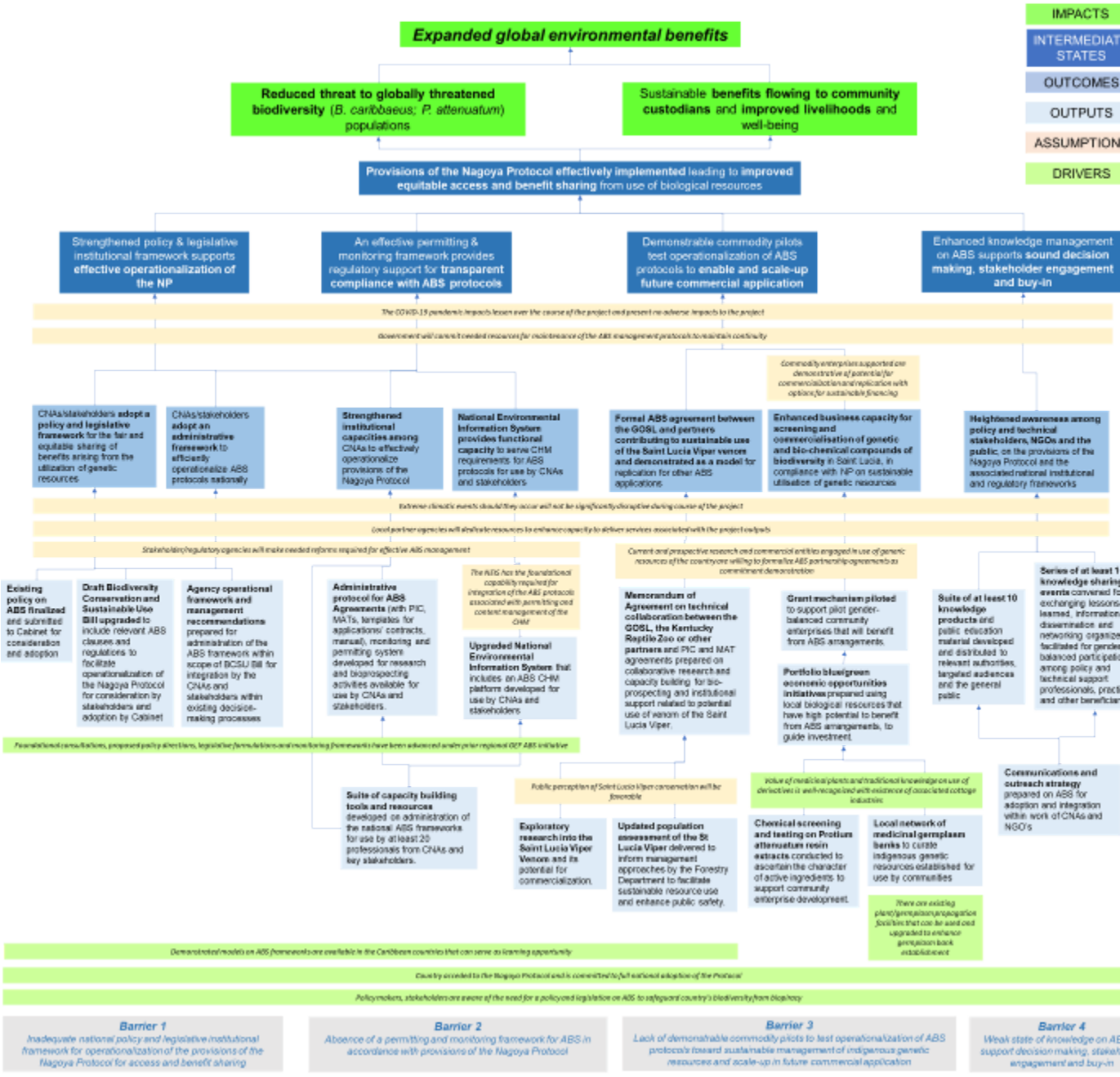

Figure 1. Project theory of change

Project Objective: To enhance the enabling environment to effectively implement the provisions of the Nagoya Protocol with a harmonized institutional and intersectoral approach as well as demonstrate replicable models for equitable and sustainable access and benefit sharing (ABS).

Component 1: Strengthen the national policy and legislative institutional framework for operationalization of the Nagoya Protocol for access and benefit sharing (ABS). Component 1 seeks

to address critical planning and management needs in order for Saint Lucia to better embrace ABS related challenges. In this regard, the project will strengthen the institutional and regulatory framework for ABS to facilitate enhanced inter-agency coordination, as well as build the necessary technical capacity required for successful implementation at the levels of national institutions and stakeholders alike, with due consideration for commercial and non-commercial access to genetic resources and the need to reduce stress on ecosystems and indicator species in Key Biodiversity Areas. As outlined under the baseline scenario, the policy and legislative framework for operationalization of the Nagoya Protocol is currently weak. While legislation exists across the various sectors to address biodiversity management in the various ministries, instruments to address specific ABS matters are non-existent. This component, therefore, focuses on enhancing the policy and legislative as well as the institutional framework for harmonized operationalization of the Nagoya Protocol for access and benefit sharing (ABS) in Saint Lucia. The goals of this component will be achieved through strengthening of the legislative, policy and institutional framework that is necessary for operationalization of the Nagoya Protocol. This component will also achieve its objectives through strengthening the institutional capacity to manage ABS related issues at the CNA and other organizational levels. Considering that several formal and informal permitting/permission agencies exist in Saint Lucia, this will require a multi-agency approach to achieve the goals and objectives.

Outcome 1.1 Competent National Authorities and stakeholders adopt a policy and legislative framework for the fair and equitable sharing of benefits arising from the utilization of genetic resources

Output 1.1.1: Existing policy on ABS finalized and submitted to Cabinet for consideration and adoption.

Now that Saint Lucia has acceded to the Nagoya Protocol, the project will implement the required policy and regulatory framework to operationalize the Protocol in country. The first step in this process will be development of a policy since enacting legislation in Saint Lucia requires the Cabinet approval of a governing policy. Under the recently concluded regional GEF UNEP-IUCN Access and Benefit-Sharing Project, a draft ABS policy and cabinet briefing document were prepared for Saint Lucia. The draft policy included considerations for the permitting, institutional and reporting mechanism to be established for Saint Lucia, to successfully operationalize the NP in country. Under this output the draft policy will receive further review supported by stakeholder buy-in and endorsement for incorporation into a final national policy on ABS. The primary activities to be conducted under this output includes finalization of the ABS policy which currently requires a final technical review, conducting of at least two national validation workshops on the policy with relevant stakeholders to ensure buy-in and familiarization with the requirements of the policy nationally. The stakeholder-approved policy and supporting documentation will be tailored and presented to Cabinet for review and final endorsement.

Output 1.1.2: Draft Biodiversity Conservation and Sustainable Use Bill upgraded to include relevant ABS clauses and regulations to facilitate operationalization of the Nagoya Protocol for consideration by stakeholders and adoption by Cabinet.

Since 2009, Saint Lucia has been developing an all-encompassing bill to address the management of biodiversity, taking into consideration all the requirements of the relevant biodiversity related MEAs. In 2015, during the regional project GEF UNEP-IUCN ABS Project, it was determined that the draft BCSU Bill did not contain clauses aimed at addressing the access of genetic resources nor the sharing of associated benefits from such access. It was also noted the Bill did not address issues of traditional knowledge in relation to the use of genetic resources. Initial revisions were made to the draft bill to include articles that would address ABS and other relevant NP issues. Under the project the process to finalize the relevant clauses of the BCSU Bill to make ABS-compliant will be concluded. The upgraded BCSU Bill will be presented for adoption by the Cabinet of Ministers. Part of the process will include recommendations for any amendments (if necessary) to existing pieces of legislation and associated regulations, with particular consideration of legislation with focus on forestry and fisheries management or those that address terrestrial and marine biodiversity so that there is regulatory coverage and appropriate institutional mandates that are complementary in execution. Gender mainstreaming considerations based on guidance adopted by the Parties to the Convention on Biological Diversity will be taken into account[27]27 in the upgrades.

The primary activities to be undertaken under this output include work with the Attorney General?s Office to upgrade the BCSU Bill to include ABS clauses and regulations dealing with *inter-alia,* dispute resolution, protection of traditional knowledge, and agreements for transfer of genetic and biological materials. The activity will also entail consultation workshops to discuss and validate the upgraded bill with all relevant stakeholders.

Outcome 1.2 Competent National Authorities and stakeholders adopt an administrative framework to efficiently operationalize ABS protocols nationally.

Output 1.2.1 Agency operational framework and management recommendations prepared for administration of the ABS framework within scope of BCSU Bill for integration by the CNAs and stakeholders within existing decision-making processes.

Currently, several agencies are considered permitting agencies in Saint Lucia. In addition, several others, though not providing permits, do provide permission to access information or sites for various cultural or traditional purposes. However, this permitting or permission system is ad-hoc in some cases and though formal in others, does not include ABS relevant considerations. Activities under this output will

build greater integration and communication among regulatory agencies and CNAs. There will be focus on gaining efficiencies based on common decision making and administrative processes as it relates to commercial and non-commercial access to genetic resources and traditional knowledge. The project will establish modalities for technical cooperation between agencies around the policy frameworks and the proposed legislative and regulatory architecture that is to be defined under Outputs 1.1.1 and 1.1.2. The project will clarify the roles and responsibilities of the designated CNAs under existing relevant biodiversity management frameworks and the required ABS protocols through national consultative processes, based on the proposed ABS policy and legislative reforms and the already existing legislative, administrative and policy provisions that guide the mandates of relevant agencies.

The project will facilitate the development of the appropriate memoranda of understanding and other inter-agency cooperation agreements within an agreed and appropriate framework. The operational framework is envisaged to fall under the broader purview of the National Biodiversity Committee that is a mechanism for ensuring relevant agencies[28]28 remain effectively engaged in discharge of their mandates in the implementation of the ABS framework. Figure 2 identifies key elements of the proposed national ABS management framework in accordance with the draft ABS legislation. Under the project, this framework will be further validated and finalized toward adoption.

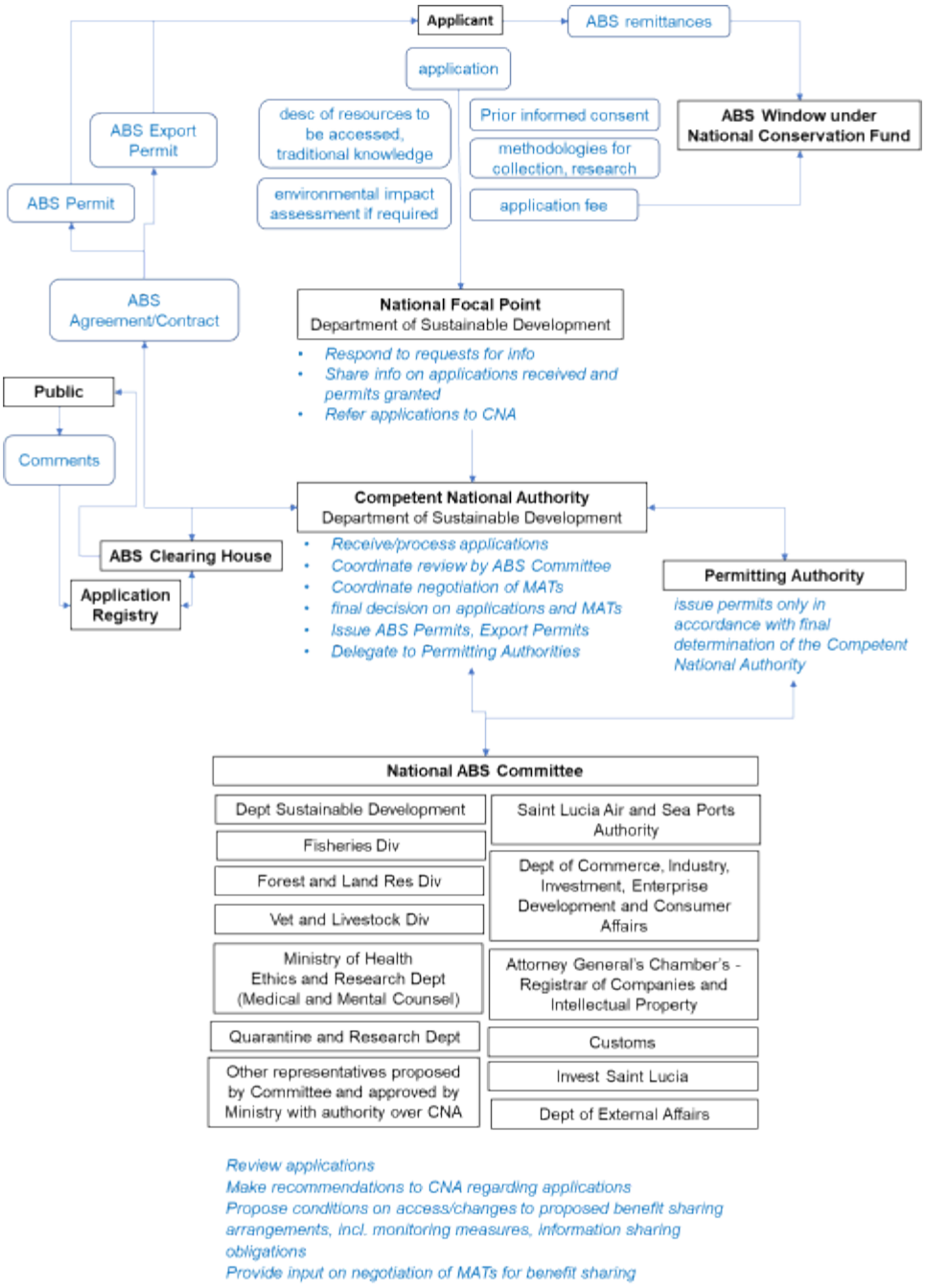

Figure 2 Elements of the Proposed National ABS Institutional Management Framework

Component 2: Develop an effective permitting and monitoring framework for ABS protocols in accordance with provisions of the Nagoya Protocol. This component focuses on building the capacity of the designated component national authorities to effectively exercise their regulatory policy and technical advisory mandates to clients and stakeholders in executing the provisions of the ABS framework. As mentioned, the current management system for ABS coordination among agencies is

non-existent. Communication among the CNAs and permission agencies is relatively non-existent with some agencies being unaware of the requirements of the NP and the importance of ensuring ABS protocols are in place to allow access to genetic materials. Though agencies like the Fisheries Division, the Agricultural Research Division and Forestry as well as the Veterinary and Livestock divisions are all permitting agencies, there is currently no corporation or coordination in the handling of permits for accessing genetic materials in country. Under this component, the project will establish a comprehensive permitting and reporting mechanism for ABS that will be accessible to all CNAs as well as permission agencies in Saint Lucia. This electronic permitting will allow for ease of coordination among permitting agencies in ensuring greater efficiency is achieved in managing applications for permits to access genetic material, as well as ensure a clearer picture can be created in tracking materials that have been accessed. This system will facilitate ease of reporting to the CHM of the CBD Secretariat on progress of NP implementation in country. A similar system has been established in The Bahamas and communications has been established between Saint Lucian and the Bahamian counterparts to facilitate sharing of lessons learnt that may be applicable to Saint Lucia.

Outcome 2.1 Strengthened institutional capacities among CNAs effectively operationalize provisions of the Nagoya Protocol.

Output 2.1.1 Administrative protocol for ABS Agreements (with PIC, MATs, templates for applications/ contracts, manual), monitoring and permitting system developed for research and bioprospecting activities available for use by CNAs and stakeholders:

The regional GEF UNEP-IUCN ABS Project contributed to the initial development of administrative processes for the operationalization of the Nagoya Protocol in Saint Lucia. However, this had been confined substantially to sensitization of stakeholders on the general framework for ABS. This project will build on the initial contribution that will result in the development of an administrative protocol for ABS Agreements (with PIC, MATs, templates for applications/contracts and a manual), and a monitoring and permitting system for research and bioprospecting activities for use by CNAs and stakeholders. The GIZ has further developed contract templates to gain PIC and MAT for access agreements and under the project these templates, will be updated and finalized to streamline the administrative protocols for ABS Agreements that will facilitate prior informed consent (PIC) in Saint Lucia. They will also be adjusted to facilitate negotiation of mutually agreed terms (MAT) for use of genetic resources. The project will also seek to implement mechanisms to ensure benefit sharing on use of traditional knowledge.

The final administrative protocol will be elaborated through continued stakeholder inputs and validation toward the finalization of ABS templates for applications and contracts. Primary activities under this component will include the designing of the protocol, conducting of at least two workshops to gain stakeholder inputs into the protocols and reviews of the existing PIC and MAT contract templates to allow their tailoring to the required context of Saint Lucia.

Output 2.1.2 Suite of capacity building tools and resources developed on administration of the national ABS frameworks for use by at least 20 professionals and CNAs and key stakeholders

One of the critical needs in Saint Lucia is capacity development on ABS and the Nagoya Protocol. The project will focus on development of capacity building tools and resources on administration of the national ABS frameworks for professionals from CNAs and key stakeholders. Under the GEF UNEP-IUCN ABS regional project, a training manual for trainers was developed and trainers were equipped to conduct capacity building training in each country. The Sir Arthur Lewis Community College (SALCC) in Saint Lucia will be engaged under the project as a key capacity building node for ABS in the country. A curricula development specialist will work with the SALCC to tailor the existing ABS manual to the school?s curriculum, establishing of criteria for completion of the certificate course and updating of the existing areas in the manual that needs to be revised. These tools will be blended into the curriculum at the school, through a certificate program on ABS that will train at least two persons from each CNA (the SDS, Forestry, Fisheries and Agricultural Research Department among other stakeholders). Core topics to be covered by the training material will include *inter-alia*, introduction to the Nagoya Protocol, triggers to designation of ABS cases when access to genetic resource require ABS agreements, elements of ABS agreements, case studies, administration of the permitting and management system, Saint Lucia?s ABS legislation and the role of local agencies.

It is anticipated that at least ten persons per year over the last two years of the project will be trained through this program. This structured capacity building program will ensure sustainability in the relevant agencies of the competences required to operationalize the Nagoya Protocol. Sustainability of the training program will be facilitated under the existing curriculum of the SALCC through either the existing Environmental Studies program or the Lifelong Studies program. Links will also be made through this program to other research centers to facilitate overall integration of ABS principles into all aspects of research and development in Saint Lucia and regionally. It is anticipated this institutionalized program will contribute to replication and uptake by partner organizations at the OECS sub-regional level and with the University of the West Indies.

Outcome 2.2 National Environmental Information System provides functional capacity to serve CHM requirements for ABS protocols for use by CNAs and stakeholders

Output 2.2.1 Upgraded National Environmental Information System (NEIS) that includes an ABS CHM platform developed for use by CNAs and stakeholders

Under the recently concluded UNEP-GEF project *Increase Saint Lucia's Capacity to Monitor MEA Implementation and Sustainable Development*, a National Environmental Management System[29]29 (NEIS) was developed. This system was intended as a comprehensive knowledge hub to service the reporting requirements to the multilateral environmental agreements, specifically the UNCBD, the UNFCCC and the UNCCD. In consideration of the approach by the Government in integrated management of environmental data, the project will embed the national clearinghouse mechanism for the ABS framework within the NEIS, thereby upgrading the Environmental Information System that includes a separate ABS CHM platform for use by CNAs and stakeholders. At the core of the system upgrade will be development of the permitting component that facilitates easy review and approval of applications, monitors compliance and reports on the access, benefit-sharing, requirements under the Nagoya Protocol. This will be integrated within a permitting system that facilitates easy application for permits and efficiently allows government authorities to review and approve applications, monitor compliance and report on the access, benefit-sharing, compliance and reporting provisions of the Nagoya Protocol. The permitting system will issue appropriate notifications to relevant authorities to inform them of the need for actions associated with applications and provide applicants current information on the progress of applications and issue notifications at stages in the process where approvals have been met, or where additional information is required on issues requiring resolution. The system will facilitate integration of all permit granting agencies within Saint Lucia and allow cross-sectoral awareness of the bioprospecting activities happening across Saint Lucia. The ABS project in The Bahamas has developed

a permitting system, the workings of which has already been shared through a regional demonstration workshop with Saint Lucia and will serve as a model for the development of Saint Lucia?s own system.

The project intends to complete the design and establishment of the digital architecture to encode monitoring data, build the database with linkages to relevant external databases, and facilitate interactive online query and submission of applications. The portal will serve as a capacity building and awareness raising tool for officials, commercial interests, researchers and local communities and provide guidance on management and monitoring of utilization of genetic resources by policy makers, regulators and checkpoints in Saint Lucia. The process will draw on the consultations and recommendations among stakeholders (maintaining gender-balanced context) in refinement of the operational processes in the development of the system. The effort under the project in developing a permitting system will contribute to the work being done in the OECS sub-region with assistance from the GIZ toward the planned eventual development of a regional-level ABS permitting system. In this regard, the project will facilitate technical exchanges and work with the OECS Commission in contribution to regionalization and sharing best practice in conjunction with work already underway.

Component 3 Establish demonstrable commodity pilots to test operationalization of ABS protocols toward sustainable management and equitable benefits of genetic resources and scale-up in future commercial application. This component focuses on testing application and operationalization of the ABS framework with case examples of indigenous genetic resources as well as reviewing possibilities for commercialization of those resources that have garnered some level of interest. There are at least two resources that will be further investigated, the venom from the endemic Saint Lucia Viper for potential applications, and the resin from the regionally endemic lansan tree that has already been yielding commercial application in value-added derivatives. As part of this process, the component will also focus on the preservation and sustained protection of these two species with planned assessments that will guide interventions for better species management. The project will also contribute to exploration of additional potential commercial opportunities from local biodiversity that can benefit from ensuring that ABS protocols are put in place. Livelihoods in many local communities are supported by exploitation of genetic resources, particularly in the use of medicinal plants. The project will seek to formalize these industries and pave the way for greater investments into products that could lead to expanded, but sustainable commercialization. Additionally, capacity enhancement and enterprise opportunities for local professionals and local communities will be enhanced based on these cooperative ABS agreements with partners that will serve as demonstration models for replication. Some informal agreements already exist, and under this project, it is envisioned that these agreements will become formal ABS agreements with future potential for both commercial and non-commercial applications.

Outcome 3.1 Formal ABS agreement between the GOSL and partners for contribution to sustainable commercial use of the Saint Lucia Viper venom and demonstrated as a model for replication for other ABS applications

Output 3.1.1 Memorandum of Agreement on technical collaboration between the GOSL, the Kentucky Reptile Zoo or other partners and PIC and MAT agreements prepared on collaborative research and capacity building for bio-prospecting and institutional support related to potential use of venom of the Saint Lucia Viper

Since 2000 the Kentucky Reptile Zoo (KRZ) has been engaged with the Department of Forestry conducting research and building capacity to manage the St Lucia Viper. The KRZ is involved in snake conservation with a wide community outreach and public awareness program, provides venom for medicinal research and provides training on safe handling methods for snakes. A small collection of the Saint Lucia Viper was transferred under agreement with the Forestry Department to the KRZ and are currently housed at its facility in Slade, Kentucky, USA[30]30. Since 2016 the KRZ has provided hands on training and equipment to Saint Lucia on safe handling of the viper. The existing informal cooperation agreement between the two entities will be formalized under this project to ensure the provisions of access and benefit sharing can be successfully applied as a ?test case? for Saint Lucia. Under an updated agreement the PIC and MAT templates developed under Component 2 will be readied for signature between the KRZ and the GOSL. The KRZ will continue its work with the Department of Forestry in training of local specialists in safe venom handling protocols. The terms of the agreement will facilitate continued support from the KRZ in local conservation efforts of the viper and enhancement of safety in communities with focus on sharing their community outreach and public awareness approaches with the government for replication.

Presently, there is research on the chemical properties of the venom of *Bothrops* species including that of the Saint Lucia Viper. This has been particularly focused on development of more effective antivenom and in evaluation of venom derivatives for medical applications in treatment of heart disease, stroke and other disorders[31]31. In 2008 the Clodomiro Picado Institute (CPI) of the University of Costa Rica completed an initial toxicological profile on the two *Bothrops* species from both Martinique and Saint Lucia. The results suggested the venom of both species have qualities that warrant further research. The Caribbean Doctors Association has been involved with this research and have expressed commitment to work with both the Government of Saint Lucia and the Clodomiro Picado Institute on further analysis of the venom from these two species. Considering the opportunity of continuing research work on the venom of the Saint Lucia Viper in the study of effects on thrombosis and treatment of heart disease,[32][32] formalized ABS agreements will be developed with these partners. Similarly, as with the KRZ, a memorandum of agreement including a benefit sharing proposal (with PIC and MAT provisions) that defines collaboration on research and capacity building related to use of the venom of the Saint Lucia Viper will be signed between the GOSL and CPI. The conclusion of the agreement within the scope of the project in accordance with the Nagoya Protocol will be the first such ABS agreement established for Saint Lucia in biomedical application and will be used as the model for establishing future agreements on the use of the country?s genetic resources.

Output 3.1.2 Updated population assessment of the St Lucia Viper delivered to inform management approaches by the Forestry Department to facilitate sustainable resource use and enhance public safety

The investment in the conservation of the Saint Lucia Viper in consideration of the potential widened commercial application of its venom extract requires stepped-up conservation of the species in the field. This will require as a base, an updated population assessment to inform management approaches by the Forestry Department to facilitate sustainable resource use and enhance public safety. Such an assessment will also facilitate much needed scientific and ecological information on the Saint Lucia Viper, information which is lacking at present. The last surveys were carried out in 2009[33]33 that estimated the general range of the species across the island and included key recommendations for management intervention. The proposed population assessment under this project will assist to understand how the threats to the species such as human persecution, alien invasive predators and loss of forest habitat may be contributing to its changing population and distribution. The assessment will also help in enhancing public safety measures in respect to reducing the possibility of snake bites, (and animals meeting their demise due to human encounters) and inform wider forest and wildlife management measures to reduce human-wildlife conflict and assist residents in communities located in closer proximity to favored habitats in taking precautionary safety measures. The study will concentrate on the main habitat areas within the central region of the island in the districts of Anse-la-Raye (Canaries, Millet), Dennery, Praslin, Dauphin (refer to Annex E).

Output 3.1.3 Exploratory assessment into the Saint Lucia Viper venom and its potential for commercialization

Under the lead of local public health practitioners in Saint Lucia, considering what has been regarded as an inadequate medical response to effective treatment of snake bites, the health care sector has been engaged in a working relationship with the Caribbean Doctors Association (CDA) and the CPI over the past 20 years. The CDA is an independent non-governmental, non-profit organization with an aim to promote socio-medical interventions, inter-regional medical and paramedical education and training among others. The Institute specializes in research on biotechnological applications for the veterinary sector through a global collaborative network with over 115 agencies. In the case of the CDA, there has been a close relationship between its affiliate, the Martinique Doctors Association and the health practitioners in Saint Lucia given that Martinique also possesses a venomous pit viper species (Martinique Lancehead *Bothrops lanceolatus*, endemic to Martinique). While a desired goal has been progress toward the eventual development of a targeted anti-venom for the Saint Lucia Viper, a collaboration with CPI and CDA seeks to also build requisite capacity in the emergency and clinical management of snake bites. As noted, in 2008 the CPI completed an initial toxicological profile on the two *Bothrops* species from Martinique and Saint Lucia where the results suggested that the venom of both species have qualities that warrants further research, particularly in potential application on thrombosis effects and treating heart disease. The anti-venom used currently to treat snake bite in Saint Lucia is derived from a polyvariant formulation (not specifically designed for the venom of the Saint Lucia Viper), however the CPI has already developed a polyvariant antivenom which includes venom from the Saint Lucia Viper.

Development of an anti-venom that more closely matches the profile of the venom of the Saint Lucia Viper is desirous, hence there is need for continued procurement of venom samples based on efficacy testing and other research requirements. Similarly, for long-term research applications in determining the potential for development of derivatives for pharmaceutical products or therapeutic treatments, a means to access venom samples into the future will be required. Currently the skill sets to safely procure field samples and process for further handling are not available in Saint Lucia. Under the project, local researchers and collaborators will be trained to safely handle wild snakes, carry out venom milking in secure environments, and process the samples for shipping and analysis. This aspect will be led primarily via certified personnel from the KRZ and the CPI. Under the project the aim is to secure a pool of at least 20 samples of snake venom over at least two field seasons, however the sample sizes and logistical arrangements will be defined during implementation. Training protocols will be developed so that capacity built locally can be replicated by trained professionals in the future.

Venom samples procured will be exchanged under ABS arrangements with the CPI. Opportunities for learning how ABS protocols are applied within the regulatory environment will be integrated within course curriculum of the capacity building programme to be developed with the Sir Arthur Lewis Community College under Component Two.

The project will also support the training of local health practitioners and first responders assigned to the various heath care facilities across the island on protocols for managing snake bites. This training, to be led by the CDA under the aegis of the Ministry of Health, will be designed to also self-assess the readiness of existing medical facilities across the country to adequately manage and treat snake bite injuries. Based on the category of service delivery of the health care facility and capacity to manage snake bite cases, recommendations will be made to the Ministry of Health regarding scaling up of anti-venom treatment and associated protocols and assuring compliance and service delivery.

An enhanced appreciation of the species in consideration of the potential benefits and the stepped-up investment in enhancing safety will serve to build citizen confidence in local ability to manage the species and ultimately reduce adverse human-snake interactions. Overall, the collaboration between the relevant agencies of the Government of Saint Lucia, the KRZ, the CPI and the CDA will enhance the ability of the country to better secure the genetic profile of this indigenous resource, reaffirm the country?s sovereign rights over its management and contribute toward improved understanding of the species and its potential uses.

Outcome 3.2 Enhanced business capacity for screening and commercialisation of genetic and bio-chemical compounds of biodiversity in Saint Lucia, in compliance with NP on sustainable utilisation of genetic resources.

Output 3.2.1 Portfolio blue/green economic opportunities initiatives prepared using local biological resources that have high potential to benefit from ABS arrangements, to guide investment.

The project will support a business profiling of a shortlist of commodities derived from indigenous biological resources in development of a bio-livelihoods portfolio of blue/green economic opportunities with *inter-alia*, nutraceutical, pharmaceutical, agricultural, food/beverage, personal care applications that have high potential economic value, that can benefit from expanded benefit sharing within an ABS framework. This will entail a gender-sensitive assessment of stakeholders who are involved in the collection of, and processing of native biological resources into value-added products to gain an understanding of local demand and external market potential, commodity value, challenges in accessing raw materials and value-added product development, along with financial, production and market access challenges. This work will be referenced against the business case development report[34][34] produced under the regional GEF UNEP-IUCN ABS project to build on the proposed opportunities applicable to Saint Lucia.

The business profiling study will look at production costs for product transformation and needed investments for scaling up product development. The study will include a proposal for the development of a specific financing window under the National Conservation Fund (NCF) that can be used to support indigenous enterprises that benefit from utilization of biological resources. Under Component 1 the project is to consider harmonized administration of the ABS frameworks which includes financial management and sustainability; the recommendations from this study will contribute to this aspect. Support partners in the consultation process and in development of enterprise opportunities include the Saint Lucia Industrial and Small Business Association, Saint Lucia Manufacturers Association, Invest Saint Lucia, Export Saint Lucia and the Saint Lucia Chamber of Commerce Industry and Agriculture.

There are initiatives being undertaken in the Caribbean to develop commercial viability of plant derivatives through various mechanisms, from which this output can benefit. Business case development possibilities will be examined under the TRAMIL Program operating in the Caribbean region. TRAMIL is a regional entity undertaking research into medicinal plants within the Caribbean region. The University of the West Indies, Mona campus through its Biotechnology Department will also be incorporated into developmental partnerships aimed at furthering commercial benefits from biodiversity species in Saint Lucia. Presently, this department is promoting awareness on ABS issues in the region with focus on reducing incidences of biopiracy.

Based on the findings of the business profiling, the project will support consultative dialogues with the business community and hosting workshops with relevant stakeholders on the recommendations developed, toward the preparation of a final Recommendations Report on ABS-related blue/green economic opportunities to inform the investment aspects of the project related to grant mechanism of Output 3.2.3 and in the longer-term beyond the project. This will be accompanied by the production of

a series of short investment guidelines on ABS potential for Saint Lucia to aid communications and expanded stakeholder engagement.

Output 3.2.2 Chemical screening and testing on Protium attenuatum resin extracts conducted to ascertain the character of active ingredients to support community enterprise development.

Since 2009 Fauna and Flora International (FFI) has been working with the Forestry Department on conservation of the lansan tree that has been traditionally exploited for its aromatic resin but has been under threat of degradation of the stock due to poor and unsustainable harvesting practices. The tree ranges within the lower montane rainforest (refer to Annex E) but it is suspected that its spatial distribution may be contracting due to poor harvesting practices that makes the tree more prone to disease and mortality in more accessible areas where that tree was once more common. The resin has traditionally been used to produce incense used in ritual and religious ceremonies, however recently local entrepreneurs have started to convert the resin into other value-added products that include aromatherapy treatments and essential oils. There are markets for lansan resin extract in neighboring islands of Dominica, Guadeloupe and Martinique with potential markets in Canada and the UK. There is at least one local entrepreneur already processing resin extract into perfume. In 2017 the Forestry Department and FFI published the findings of the *Sustainable Harvesting of Lansan Project* that contained key recommendations that included the development of regional geographic indicators among the countries where the specie is found, establishing links to product development, establishment of regulation governing export of the raw product and derivatives, and the possibility of listing the specie on Appendix 3 of the Convention on Trade in Endangered Species (CITES) to regulate trade on account of its vulnerability.

In view of the potential to develop lansan-based derivatives for commercial application, the project will firstly establish arrangements with component diagnostic laboratories within the region (and outside the region if needed) to support chemical screening and testing on *Protium attenuatum* resin extracts. This will be to ascertain the character of active ingredients including cosmetic, pharmaceutical and medicinally active substances to explore the potential product applications that will help in the development of sustainable livelihood opportunities and substantiate justification for further policy and management investments around conservation of *P. attenuatum*. Samples of the raw resin extract will be shipped to diagnostic labs (to be determined following project inception) over the course of the project. The findings, to be contained in chemical screening reports, inclusive of the chemical profiling and characteristics, and safety considerations in formulation preparations, will be shared with the technical collaborators on the project, notably the Saint Lucia Bureau of Standards, and enterprises and stakeholders engaged in the harvest and conversion of lansan into value-added products. The chemical screening findings, in conjunction with feedback from stakeholders will be formulated in a recommendations report on community enterprise development possibilities.

Output 3.2.3 Grant mechanism piloted to support pilot gender-balanced community enterprises that will benefit from ABS arrangements.

The project will contribute seed-funding through a grant mechanism that will be used to support business start-ups that use native biodiversity that will benefit from ABS arrangements. Several species of flora are currently being used to build various cottage industry enterprises in Saint Lucia. According to the Forestry Department non-forest timber products (NFTP) such as vanilla (*Vanilla planifolia*), mauby (*Colubrina elliptica*), latany? (*Coccothrinax barbadensis*), bay leaf or bwaden (*Pimenta racemose*), are used to derive income generating products. Bay leaf for example is used in the production of essential

oils, tea, confectionary, ointments and bayrum. It is one of the products currently exported from Saint Lucia but is only regulated through requirements for an export permit. Other species used locally include *Bidens pilosa* locally referred to as Spanish Needles, touted as having potential for treatment of diabetes and kidney disease; *Cecropia schreberiana*, locally known as Bwa kannon, a West Indian endemic from which its derivatives can be used for treating symptoms of flu[35]35 and *Atrocarpus altilis,* breadfruit, which has also been associated with treatment for diabetes and high blood pressure, based on local traditional knowledge. The true extent of use and the number of these and other species being used is unknown but the value they bring to sustain livelihood activities in Saint Lucia is estimated to be significant. In this regard, there is high interest to ensure that community-level economic opportunity and traditional knowledge associated with use of these species (and others with high potential) are secured under ABS arrangements and incentivized in enterprise development support.

Project seed financing in the form of a grant allocation of US$100,000 will be made available in at least 5 small grant packages to eligible applicants to support business that will benefit from ABS arrangements. On project inception and implementation, the number of awards based on demand will be assessed. The criteria and operational framework to include gender considerations for the grant mechanism will be elaborated as one of the initial activities to be completed. The Saint Lucia National Conservation Fund (SLUNCF) under partnership with the project will administer and monitor the grant funding mechanism and projects during project implementation. The project grant mechanism will emulate the existing NCF grant instruments already in use, to reduce transaction costs and facilitate ease of roll-out. Association with the NCF will also build in the possibility for long-term sustainability of the project investment.

Within Year Two of the project start-up, the NCF will launch the first call for proposals from stakeholders based on the findings and recommendations of the portfolio blue/green economic opportunities developed as Output 3.2.1. These proposals will be screened and evaluated through the call for proposals process already in place by the SLUNCF.[36]36 The SLUNCF will provide the coordination to gain access to needed technical and business support on behalf of the grantee and will monitor the grant performance during implementation. The SLUNCF will also issue periodic portfolio performance reports as part of the overall project monitoring framework. Technical and business capacity development support will be delivered through targeted individual coaching and group training developed from services available from key partner agencies including the Ministry of Agriculture, Ministry of Commerce, Export Saint Lucia and the Saint Lucia Manufacturers Association. The scope and number of training opportunities will be further defined over the course of project implementation but is anticipated that at least 4 major trainings will be held. The project will seek to gain gender parity in respect to award of the grants with a least a 50-50% ratio of awards to female beneficiaries.

In addition to exploring how the project can augment resources available from the GEF Small Grants Programme (GEF-SGP) and the SLUNCF, both of which are targeting local small community enterprise development in sustainable use of natural resources, collaborations will be sought with other financial entities to gain access to funding through grants or reimbursable loans both locally and regionally through programs that target micro, small and medium size enterprises (MSMEs). Within the country, partnerships will be fostered with local lending agencies to potentially co-finance the grants made available under the project. Key among these agencies will be the Saint Lucia Development Bank that supports developmental projects that benefit the triple bottom line in realizing social, environmental and economic benefits. The bank has partnerships with green financiers and access to specialty loan guarantees that will be beneficial to the pilot projects to be undertaken. Negotiations will be expanded further during full project implementation. The project will similarly explore opportunities with major credit unions on the island. At the regional level one such mechanism is the Funding can also be accessed through the Compete Caribbean Partnership Facility[37][37], a regional grant and investment funding partnership working in over thirteen countries in the Caribbean region.

At the close of the project a Final Review Report on the supported pilots with sustainability options will be prepared for consideration by stakeholders.

Output 3.2.4 Local network of medicinal germplasm banks to curate indigenous genetic resources established for use by communities

The project will support the establishment of a local network of medicinal germplasm banks to curate indigenous flora to supply germplasm for multiplication to conserve particularly rare species and those that have known and potential medicinal, food security and commercial applications that may also present best candidates for ABS application based on findings under Output 3.2.1. These germplasm banks (gardens) will be established within existing plant propagation facilities in the island such as those of the Ministry of Agriculture which currently provide planting materials to communities. Germplasm banks will also be established at health care and/or educational institutions with capacity to direct appropriate use for treatment of ailments to beneficiary communities, to document use and effects, and otherwise utilize as educational tools.

On project inception, a review of current measures and global best practice options for developing germplasm banks best suited to Saint Lucia will be undertaken. This will be further guided through dialogues with medicinal and other use practitioners on options for developing and safeguarding germplasm stock. The findings will be consolidated in a Recommendations Report detailing a management framework for establishment of the germplasm banks including production and distribution protocols, health and safety protocols, emergency management measures among others, including a financial management plan. The Recommendations Report will in turn inform the preparation of a scope of works and tender documents for the 5 germplasm bank facilities to be upgraded and/or established. The facilities will be designed using green approaches so that there is minimal adverse environmental consequences; they will rely high nutrient and water use/irrigation efficiency, employ waste recycling and composting and integrate use of renewable energy for small-scale power needs. The facilities will provide specially designed spaces for storing seed stock in keeping with international best practice.

With the establishment of the germplasm facilities the project will support at least two training workshops with germplasm bank custodians.

Component 4 Enhance knowledge management on ABS to support decision making, stakeholder engagement and buy-in. This component will enhance overall knowledge management on ABS to support decision making, stakeholder engagement and buy-in to the importance of mainstreaming policy and technical approaches to effectively capitalize on potential opportunities for sustainable use of native genetic resources, and the need to ensure that benefits accrued are repatriated to the country and communities. Though there is some level of awareness on the Nagoya Protocol, it is not enough to facilitate sustained effort required to fully mainstream ABS management protocols in the country. There will be a focus on awareness raising for NGOs, the private sector and the public on the Nagoya Protocol and its implications, with emphasis on operationalization of the ABS framework within the national enabling environment toward successful uptake of and buy-in to the Protocol.

Outcome 4.1 Heightened awareness among policy and technical stakeholders NGOs and the public on the provisions of the Nagoya Protocol, and the associated national institutional and regulatory frameworks.

Output 4.1.1 Communications and outreach strategy prepared on ABS for adoption and integration within work of CNAs and NGOs

To deepen perception of relevance of the issues of access and benefit sharing and how stakeholders may better understand direct benefits and avenues for effective participation across all levels in the process, a Communications and Outreach Strategy on ABS for adoption and integration within work of CNAs will be prepared. The Strategy will consider conservation of wild landscapes and protected areas, protection of endangered species and species of high value, and safeguard of traditional knowledge associated with uses of genetic resources. Of particular importance will be inclusion of gender-sensitive considerations and enhancing gender-based economic opportunities around the use of genetic resources. Baseline work has already been done in Saint Lucia on this issue. Under the Gender and Ecosystem Resilience Project, a link has already been made between ecosystem sustainability and gender through sustainable livelihood activities[38][38]. This communications and outreach strategy will therefore be crafted to create clear gender-sensitive audience-tailored messaging, drawing on awareness resources already developed by the CBD Secretariat and under the contributions of the regional GEF UNEP-IUCN ABS Project. The strategy will also define how all the project outputs and learning from implementation will be captured and organized so that they are easily accessible by beneficiaries and users. It will also include measurable targets and gender-sensitive indicators to assess uptake and receptivity with audiences. The strategy will detail recommendations for sustainability and replication of results for follow-on and related initiatives. As with other components of the project, the strategy will also consider how the onset of the COVID19 pandemic has impacted business processes and livelihood opportunities and how messaging will resonate in a positive way to solicit participation and buy-in among stakeholders. The project will build its profile through the strategy, in alignment with global agendas, notably the Sustainable Development Goals, the Post-2020 Global Biodiversity Framework and the UN Decade for Ecosystem Restoration.

At the start of the project, a knowledge, attitudes and practice (KAP) survey will be initiated to assess overall awareness of the Nagoya Protocol, principles of access and benefit sharing and perceived benefits of biodiversity and genetic resources conservation across the spectrum of national stakeholders. The findings of the survey will assist guide the development and implementation of the Strategy over the project duration. Near the end the final year of project implementation, the KAP survey methodology will be replicated to determine whether there were changes in knowledge and perceptions and behavior changes that may have been triggered by the project.

Output 4.1.2 Suite of at least 10 knowledge products and public education material developed and distributed to relevant authorities, targeted audiences and the general public

Based on the recommendations of the Communications and Outreach Strategy as well as stakeholder inputs, the project will contribute to the development of a suite of knowledge management products and public education material that is distributed to relevant authorities, targeted stakeholders and audiences, and the general public. The inputs for these knowledge management resources will be derived from of the products already in draft or completed under the previous regional GEF UNEP-IUCN ABS project and from knowledge generated across the various project components during the course of implementation. The project will develop the following knowledge products:

? At least four targeted message videos on specific ABS topics in short-duration public service announcement (PSA) formats, and longer-duration teaching aid formats that showcase the global significance of Saint Lucia?s biodiversity, the need for conservation safeguards against biopiracy and societal benefits from sustainable use that can be enhanced in the context of the Nagoya Protocol.

? At least four information fact sheets each tailored for the following groups (i) the hospitality sector (tour guides, air and ground transportation services, accommodation services), (ii) school students at both primary and secondary levels, (iii) senior-level public and private sector decision makers, and (iv) communities and the general public. Emphasis on the hospitality sector will be a new area of outreach and recognized necessary given that tour guides and transport operators tend to provide the means for bio-prospectors to source information about, and otherwise gain access to targeted biodiversity resources and local and traditional knowledge.

? At least two pocket guides each tailored to target (i) university level students and (ii) researchers. These pocket guides will offer quick facts on the Nagoya Protocol, national obligations of the country on accession to the Protocol and the relevant laws of Saint Lucia related to biodiversity, with focus on ABS regulations and sovereign rights of Saint Lucia over its resources. The guides will also provide information on the CNAs and relevant points of contacts.

It is anticipated that resources will be made available in all commonly used formats ranging from conventional printed media to electronic media and social networks. The upgraded ABS CHM will serve as a core repository for resources developed under the project. It is also envisioned that Saint Lucia will be able to update and manage its page on the regional website for ABS created under the previous regional GEF UNEP-IUCN ABS project.

Output 4.1.3 Series of at least 10 knowledge sharing events convened for exchanging lessons learned, information dissemination and networking organized and facilitated for gender-balanced participation among policy and technical support professionals, practitioners and other beneficiaries.

The project will host at least 10 knowledge sharing events for exchanging lessons learned, information dissemination and networking among policy and technical support professionals, practitioners and other beneficiaries. These events will be hosted alongside key commemorative days notably World Environment Day, International Day for Biological Diversity, International, Forest Day, World Food Day, World Intellectual Property Day and World Consumer Rights Day among others. The events will be designed so that virtual platforms, that have been upgraded in the wake of COVID19-induced alternatives to physical travel, can take full advantage of webcasting these events to regional and international audiences. These knowledge sharing events will include learning opportunities tailored to students through creative writing and other forms of competitions and in-field learning. Lessons learnt from the project will be shared with regional level agency partners over the life of the project. Through the OECS Council of Ministers of the Environment meetings it is anticipated the OECS Member states will be informed and encouraged to continue what has been initiated in Saint Lucia. Similar meetings will be at the CARICOM level through the Council for Trade and Economic Development (COTED). Knowledge sharing events will be held at regular intervals over the project duration to ensure stakeholders are kept informed on progress and have the means to provide routine feedback to the project management and share lessons on their experiences. These events will be organized in a variety of formats ranging from townhall-style meeting to focus-group sessions, using in-person and hybrid

meeting options. The project anticipates hosting at least three information sessions with the University of the West Indies (UWI) and the Sir Arthur Lewis Community College on ABS processes and research requirements in Saint Lucia, and at least five general information sessions on ABS for local resource users, to include *inter-alia*, medicinal plant users and healers, lansan tappers and other practitioners working with local genetic resources. Inter-island knowledge sharing and networking will be supported under the project via exchanges between CNAs of countries that have made significant progress in advancing the Nagoya Protocol. The Bahamas will be one of the countries anticipated to participate in such an exchange event with Saint Lucia. Knowledge exchange opportunities will be organized with the GIZ through cooperation agreement on ABS with the OECS commission to expand networking.

Output 4.1.4 A project monitoring and evaluation system will be put in place to ensure continual assessment of progress in meeting project outcome and output targets. The monitoring, evaluation and learning system will ensure full transparency of the project progress and performance against the results framework, and compliance with the established reporting and evaluation requirements (refer to Section 9 Monitoring and Evaluation).

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

Biodiversity focal area: ***BD-3-9*** *Further development of biodiversity policy and institutional frameworks through the Implementation of the Nagoya Protocol on Access and benefit sharing.*

Biodiversity focal area: BD-3-9 Further development of biodiversity policy and institutional frameworks through the Implementation of the Nagoya Protocol on Access and benefit sharing. The project is in alignment with the Objective 3 of the GEF-7 biodiversity focal area strategy that seeks to strengthen biodiversity policy and institutional frameworks and in this regard, it will contribute to advancement of Saint Lucia?s commitment under the CBD in mainstreaming the provisions of the Nagoya Protocol within national frameworks. This will be in alignment of the Second National Biodiversity Strategy and Action Plan (2018-2025) where the ambition is to safeguard genetic diversity, and that biodiversity benefits are generated for all citizens through the fair and equitable sharing of benefits arising from utilization of genetic resources.

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

Baseline	Incremental Cost
Under the baseline scenario Saint Lucia?s capacity to implement and operate an effective and transparent national framework for enhancing access and benefit sharing on utilization of genetic resources will remain low. In the absence of the proposed project, progression toward full operationalization of the Nagoya Protocol following the recent accession to the Protocol (July 2022) will likely remain a low priority and advancement of the draft ABS policy and legislation will remain stymied. Under a business-as-usual scenario the organizational approach to operationalizing the ABS framework may not be sufficiently mainstreamed and harmonized with existing national frameworks to realize management effectiveness and cost efficiency gains in decision making where there are areas for joint cooperation among CNAs. There will likely remain a fragmented approach among the national agencies without sufficient regulatory ability to facilitate coordinated responses to ensure that genetic resources, where being used particularly for commercial purpose, are subject to adequate permitting, tracking of use and repatriation of benefits.	With the GEF investment there will be a further strengthened capability across all levels within national competent authorities. This will build on the existing baseline that has been developed through the country?s participation in the regional ABS project in which policy and regulatory frameworks were developed following generalized regional models with tailoring to national circumstance. The country however needs to operationalize and validate the framework that will serve to maximize on synergies in decision making, streamline administrative processes and reduce burden on CNAs that are otherwise constrained by limited capacities. The project will facilitate the upgrade to the draft Biodiversity Conservation and Sustainable Use Bill that includes relevant ABS clauses and regulations. The project will contribute to the country?s advancement toward mainstreamed ABS within national frameworks following accession to the Nagoya Protocol, via a consultative process among stakeholders, for consideration and adoption by the Cabinet of Ministers.

Baseline	Incremental Cost
Under a business-as-usual scenario relative to the ability to realize the operational protocol associated required for implement provisions of the Nagoya Protocol, the country will remain without a mechanism to effectively monitor ongoing research and development with native genetic resources and associated traditional knowledge, or commercialization of developed products. While there have been past collaborations with research entities in use of the country?s genetic resources, the arrangements have been substantially informal, without specific terms of agreement to secure a pathway for sustainable repatriation of benefits to the country. This challenge will persist without further investment in formalization of the administrative protocols for ABS agreements in terms of finalization of PIC and MATs protocols, along with the templates for applications, and guidance tools to administer, including the needed information systems for monitoring and permitting. The country has gained some exposure to the management requirements of the ABS framework through capacity building and knowledge exchange via prior project interventions, but level of capacity still falls short of what is required. Aspects such as ability to undertake cost-benefit analyses associated with bioprospecting and use of genetic resources remain poorly understood, with limited ability to apply in policy development that may support local enterprise development around local biodiversity. The country has been making investments in enhancing consolidation of national data and information systems that will serve reporting needs to the MEA conventions. The NEIS provides a platform upon which an ABS CHM to support implementation of the Nagoya Protocol can be built. Further upgrades and modifications will be required to make the NEIS adequately function as a CHM, which will not likely happen without additional investment.	The GEF investment will contribute to an effective permitting and monitoring framework for research and bioprospecting permits associated with the ABS framework along with associated protocols. The project will advance the implementation of the provisions of the Nagoya Protocol through the provision of administrative protocols for ABS Agreements that includes templates for PIC and MATs associated with applications/contracts within operational manuals. The project will generate a suite of capacity building tools and resources on administration of the national ABS framework and deliver associated training, to professionals from the CNAs and stakeholders within key support and beneficiary organizations. Under advancement of the Nagoya Protocol, the project will partner through south-south cooperation with research institutions in the region and further afield to boost local capacity in applications such as genetic profiling, resource extraction and processing technologies as relevant to the resources targeted under the project. The project will contribute to the further development of the national clearinghouse mechanism needed for operationalization of the ABS framework. The basic elements were created under the regional GEF ABS initiative, however with the commissioning of the National Environmental Information System by the GOSL to serve as a common hub for environmental information for reporting to the MEAs, opportunity will be taken under the proposed GEF project to making the NEIS a common platform to host the CHM via appropriate upgrade to the system along with associated operational protocols.

Baseline	Incremental Cost
Under the business-as-usual scenario the country will likely not translate existing and prospective research and commercial collaborations and applications presented by partners in the use of genetic resources into agreements that return equitable benefits to the country. The current agreement between the Forestry Department and the Kentucky Reptile Zoo in use of the venom of the Saint Lucia Viper has immediate potential to be transformed to an ABS-compliant agreement, however it is likely that without further investment, focused support to continue the negotiation process with all parties to realize MAT, with a clear basis for long-term collaboration will remain sub-optimal. Without taking advantage of this demonstrable model, the crafting of new and prospective ABS templates for other genetic resources that are already being bio-prospected, will be disadvantaged without the benefit of using a case example that will provide a model and needed experience. Among the potentially derived benefits from the collaboration with research and commercial partners under an ABS framework in respect to the use of the Saint Lucia Viper, will be enhancement of skills to carry out basic diagnostics including extracting and processing of the venom locally. This skill does not reside locally, and without it the country will not be able to build the national capacity to transform this potential resource into more direct local economic benefit. Saint Lucia lacks specific analyses and profiles of potential enterprises that could potentially benefit from ABS applications that can enhance economic opportunities particularly at the community level. Without this information, development of business opportunities secured by ABS agreements that may have benefits at the community level will be limited and that traditional knowledge associated with the use of local biodiversity will not yield economic opportunity. Organizations that represent community stakeholders will remain without the tools and capacity to support enterprise development based on secured ABS arrangements. Finally, there is no experience in the country in designing and creating fiscal incentives to stimulate entrepreneurs to invest in commodities and/or value chains that utilize ABS agreements and this will persist without investment by the project.	The project will build the cost-benefit case for investments in a strengthened regulatory framework for ABS through economic models that demonstrate how measures to conserve biodiversity can be transformed into sustainable present and future revenue generation streams. The project will support the development of a pilot business model for contribution to return of benefits associated with the use of genetic resources and enhancement of sustainable livelihoods connected with the resource use, with a strong emphasis on community-based SME capacity development. A key outcome will be new agreement on technical collaboration between the GOSL and Kentucky Reptile Zoo and PIC and MAT agreements on collaborative research and capacity building for bio-prospecting and institutional support related to use of venom of the Saint Lucia Viper. The negotiation process and the agreement will provide the means to test and validate the national ABS framework that may be applied in future partnerships. The project will support additional collaboration among partners in management approaches to facilitate sustainable resource use, handling protocols, diagnostic methodologies and deliver training resources for use by wildlife management professionals and medical practitioners. The project will contribute to incentivizing small business enterprises in sustainable use of biological resources through the analysis of potential economic opportunities from present and future biodiversity use that may benefit from expanded economic growth through ABS arrangements. In this regard, a portfolio blue/green economic opportunities initiatives based on use of local biological resources (with *inter-alia* nutraceutical, pharmaceutical, agricultural, food/beverage, personal care applications) will be developed for consideration by national stakeholders to help guide investment policy and provision of needed support measures for enterprise development, with emphasis on community-based initiatives. The project will contribute to a small grant mechanism to community-based groups via the National Conservation Fund and augmented by the GEF Small Grants Programme to incentivize enterprise development around ABS applications.

Baseline	Incremental Cost
Without the project intervention, awareness-raising among policy makers and stakeholders in advancement of the ABS operational framework will be negatively impacted; that includes understanding the implications of the recent accession by Saint Lucia to the Nagoya Protocol, and the extent to which commitments will be actioned to implement the needed institutional and regulatory reforms. Under the business-as-usual scenario, the degree to which stakeholders and beneficiaries can be engaged and mobilized will be marginal, as they will not appreciate the benefits that may be accrued in the context of biodiversity safeguards and conservation, and the possibilities of development of opportunities for enhanced livelihood opportunities.	The proposed project will support a coordinated approach in building awareness on ABS in line with the overall project design, informed by a communications and outreach strategy. This communications and outreach strategy will help to define the critical messaging that will resonate with stakeholders in terms of the rationale why the country should move toward better recognition of the importance of ABS in management of genetic resources. The enhanced awareness will facilitate the adoption of the legislative and regulatory means to operationalize the Nagoya Protocol. Informed by the communications and outreach strategy the project will contribute to the development and uptake of various knowledge products and public education material targeted at relevant authorities, key recipient audiences including the private sector and the general public. The awareness raising efforts will include a series of special knowledge sharing events for exchanging lessons learned, information dissemination and networking for participation among policy and technical support professionals, practitioners and other beneficiaries.

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

The project will directly contribute towards global compliance in ensuring all parties to the CBD enact requirements, including national legislation, to comply with the Nagoya Protocol on ABS and the fair and equitable sharing of benefits arising from the utilization of such resources. Building strong national capacity and management frameworks for adoption of the ABS mechanism in keeping with the Convention on Biological Diversity?s Nagoya Protocol in the conservation and sustainable use of genetic resources will contribute to global level benefits as Saint Lucia, has a relatively high level of endemism for a small island developing state. The country harbors 9 species of endemic flora with another 99 species that are endemic to the Lesser Antilles[39]39 and 14 species of fauna that are endemic to the island and are found only within the Lesser Antillean region. Strengthening of ABS systems and ratification of the Nagoya Protocol by Saint Lucia creates a suitable environment for genetic resource protection and conservation, and the proper sharing of benefits will improve the environmental conditions in the region. With conservation focus on the Saint Lucia Viper (*Bothrops caribbaeus*) and the lansan tree (*Protium attenuatum*) the project will contribute to enhanced landscape management interventions over a total of 14,970 hectares outside protected areas (government forest reserves); this is equivalent to 70% of the estimated range of the viper of 12,600 ha and 50% of the estimated range of the

lasan tree of 12,300 ha, that falls outside protected areas. The global environment will benefit from the general safeguard of natural resources and associated traditional knowledge, and from enhancing the regional recognition and acceptance for the value of biodiversity in such a unique hotspot as the Caribbean. The project will contribute to collective expertise not only in Saint Lucia but in the Caribbean region that will help with widening sustainable management of genetic resources and safeguarding environmental benefits within the region. Defining how to regulate access to genetic resources, how to implement the fair and equitable sharing of benefits resulting from the utilization of genetic resources and traditional knowledge associated with genetic resources, defining enforcement measures that ensure compliance by users, and improving institutional capacity under the project will ensure all obligations under the NP are appropriately met and enhance the overall global goal of sustainably accessing and sharing the benefits of genetic resources worldwide. The lessons learnt from the project will also improve and enhance the work on the Nagoya Protocol in the wider Caribbean as Saint Lucia shares this experience to catalyze similar processes in the Caribbean region.

7. Innovativeness, sustainability and potential for scaling up

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Innovation: The project will demonstrate innovativeness. Through the project investment, Saint Lucia will test a ?SIDS-appropriate? approach in establishing a harmonized framework for ABS that draws on the operational synergies among the agencies that are designed with CNA responsibility. This is important in the context of small island developing states like Saint Lucia that are resource-constrained. The project will drive innovation in creating conditions to further facilitate the exploration of potential economic value of the venom of the Saint Lucia Viper snake and the lansan tree; an island endemic and a regional endemic respectively, that are both ranked as having significant global conservation significance. This will be done though enhancing the scientific networking and collaboration among organizations already engaged in the space, in assisting with needed scientific assessments, profiling of the derivatives and strengthening conservation actions. Another key area of innovation is the inclusion under the project of a grant award scheme to help catalyze and expand community-based economic opportunities in the use of biological/genetic resources of the country that demonstrate good prospects for security of benefits to user communities and custodians. The project, through engagement of the Saint Lucia National Conservation Trust Fund will enable the country to apply innovation in development of appropriate financial mechanisms that can ensure that monetized ABS benefits, are translated to maintenance of the regulatory systems to support conservation and sustainable use of biodiversity, including genetic resources.

Sustainability: Sustainability of the project results will be ensured through the continued strengthening of the national enabling environment which includes legally constituted and functional cross-sectoral policy and technical decision-making architecture for ABS matters. The project will continue to build the national protocols and the associated institutional capacities within the relevant competent authorities with robust systems for monitoring of use of genetic resources for research and commercial purpose. The project will strengthen the capacity of competent national authorities and define the modalities for cooperation and coordination and enhance awareness to support decision making at the policy level and expanding stakeholder engagement. These measures will be across key sectors including agriculture, animal and human health, fisheries, food safety, resource management, transportation and trade. A critical underpinning for sustainability will be the enhancement of scientific capabilities in genetic,

chemical analyses and other methods that will expand needed skills locally and help provide more readily accessible technical support to stakeholders and investors. The key mechanism that underpins the operational sustainability of the GEF investment is the full development of the ABS clearinghouse mechanism. The ABS clearinghouse will facilitate exchange of data and support national implementation of the Nagoya Protocol. Sustainability of managing the CHM will be ensured as it will be embedded within the National Environmental Information System (NEIS)[40]40 that serves as the integrated biodiversity information resource gateway for the country. The online portal currently hosts information on the multilateral environmental agreements along with indicators on how Saint Lucia has been progressing in meeting the obligations under those agreements. The site, which is password protected, provides the foundation for the building of the permitting system to be developed under Component Three. This will help ensure a more integrated system of communication and data collection in Saint Lucia as a sustainable means of managing development initiatives throughout the country.

The scaling ? up potential: The project will represent further scaling up of GEF investments in the Caribbean where the ABS clearinghouse/permitting system that has been developed for The Bahamas (under the *Strengthening Access and Benefit Sharing (ABS) in The Bahamas* project) and the initial baseline system developed under the regional GEF-UNEP-IUCN *Advancing the Nagoya protocol in countries of the Caribbean Region* project, will be used as models, templates and guides to help in the development of the permitting system envisaged under Component Three. It should be noted that the work in Saint Lucia will draw on the experiences from other Caribbean countries such as The Bahamas, to bolster the national regulatory and institutional framework associated with bio-prospecting and research efforts, with the integration of PIC and MAT, at the national level. The permitting system implemented in The Bahamas will be used as a model to develop the integrated permitting system mentioned earlier for the data management NEIS system. Since the electronic permitting system implemented under that country?s ABS project is currently working efficiently, it is a proven example to use for the development of the data management system under Component Three. This will also constitute continued scaling up of the foundational works under the regional ABS project and contribute to the strengthening of the regional frameworks in general. This sustained momentum will help to bolster the continued work in Saint Lucia as the regional OECS mandates for Member States will help ensure governments undertake activities to comply with the requirements for efficient ABS management within the region. The outcomes of the project will also be shared with other countries as a means of enhancing and advancing their preparations of national regulatory frameworks for efficient ABS management systems. The investments under Component 4 are designed to propagate knowledge gained to facilitate scaling-up efforts through the generation of and dissemination of tailored knowledge products for target audiences, encourage knowledge and experience exchanges and networking among practitioners.

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[1] https://www.cbd.int/abs/doc/protocol/factsheets/policy/abs-policy-brief-agriculture-web-en.pdf

[2]UNEP (2003), Access to Genetic Resources and Fair and Equitable Sharing of Benefits arising from their Utilization http://www.pnuma.org/forodeministros/14-panama/pan04nfi-AccesstoGeneticResources-Rev1.pdf

[3] CBD (2009) What is Island Biodiversity? https://www.cbd.int/island/intro.shtml

[4] GOSL, Daltry (2009) The Status and Management of St. Lucia?s Forest Reptiles and Amphibians. https://www.researchgate.net/profile/Jennifer_Daltry/publication/261133149_Biodiversity_Assessment

_of_Saint_Lucia's_Forests_With_Management_Recommendations/data/0deec53342d78bbd6b000000/Daltry-2009-Biodiversity-Assessment-Saint-Lucia-low-res.pdf

[5] GOSL (2018) Revised Second National Biodiversity Strategy and Action Plan (NBSAP) (2018 ? 2025) For Saint Lucia https://www.cbd.int/doc/world/lc/lc-nbsap-v2-en.pdf

[6] Graveson (2019) notes that collections are contained in the University of Rio Pedras, Puerto Rico http://saintlucianplants.com/acknowledgments.html

[7] Luna, da Silva, Pereira (2011) Clinical and immunological aspects of envenomations by Bothrops snakes J. Venom. Anim. Toxins incl. Trop. Dis vol.17 no.2 Botucatu http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1678-91992011000200003

[8]Mohamed Abd El-Aziz T, Garcia Soares A, Stockand JD. Snake Venoms in Drug Discovery: Valuable Therapeutic Tools for Life Saving. Toxins (Basel). 2019 Sep 25;11(10):564. doi: 10.3390/toxins11100564. PMID: 31557973; PMCID: PMC6832721 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6832721/

[9] Daltry, J.C. (2009) Biodiversity Assessment of Saint Lucia?s Forests, With Management Recommendations. Technical Report No. 10 to the National Forest Demarcation and Bio-Physical Resource Inventory Project, FCG International Ltd, Helsinki, Finland. https://www.researchgate.net/profile/Jennifer_Daltry/publication/261133149_Biodiversity_Assessment_of_Saint_Lucia's_Forests_With_Management_Recommendations/data/0deec53342d78bbd6b000000/Daltry-2009-Biodiversity-Assessment-Saint-Lucia-low-res.pdf

[10] Daltry, J.C. & Powell, R. 2019. Bothrops caribbaeus. The IUCN Red List of Threatened Species 2019: e.T50956889A50956898. https://www.iucnredlist.org/species/50956889/50956898

[11] Breach, Katherine (2009), *Quantifying the interactions between humans and endemic pitvipers (Bothrops caribbaeus) in Saint Lucia,* Masters Thesis, Imperial College London, London.

[12] Graveson (2019) Plants of Saint Lucia http://www.saintlucianplants.com/floweringplants/burseraceae/protatte/protatte.html

[13] Daltry, J.C. & Prospere, A. 2021. Protium attenuatum. The IUCN Red List of Threatened Species 2021: e.T33993A142228872 https://www.iucnredlist.org/species/33993/142228872

[14] Saint Lucia Forests and Land Resources Development Department (2015), Management Plan for

Saint Lucian Lansan 2015-2025

[15] de Lima et al., (2016) Essential Oil from the Resin of Protium heptaphyllum: Chemical Composition, Cytotoxicity, Antimicrobial Activity, and Antimutagenicity. Pharmacogn Mag. 2016 Jan; 12(Suppl 1): S42?S46 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4791998/

[16] Daltry, J. & Isidore, L. (2018), The Impact on Lansan trees of resin collection by trained tappers, GOSL

[17] Saint Lucia Forests and Land Resources Development Department (2015), Management Plan for

Saint Lucian Lansan 2015-2025

[18] GEF-UNEP-IUCN (2019) Development of Business Model for Access and Benefit Sharing in the Caribbean Region https://www.abscaribbean.com/sites/default/files/Business%20Model%20for%20ABS%20in%20the%20Caribbean%20Region.pdf

[19] ACP BioSpace project summary retrieved from https://oecs.org/biospace-ilm/images/ACPProjectSummary.pdf

[20] Saint Lucia SFA2003 Programme of Economic and Agriculture Diversification and Poverty Reduction through Integrated National Resources Management

[21] GOSL, Clarke (2009) The Mammals of St. Lucia. http://sluncf.org/Portals/0/Documents/Flora-and-Fauna/Mammals%20of%20St%20Lucia.pdf?ver=2018-03-19-153949-740

[22] GOSL, Daltry (2009) The Status and Management of St. Lucia?s Forest Reptiles and Amphibians. https://www.researchgate.net/profile/Jennifer_Daltry/publication/261133149_Biodiversity_Assessment_of_Saint_Lucia's_Forests_With_Management_Recommendations/data/0deec53342d78bbd6b000000/Daltry-2009-Biodiversity-Assessment-Saint-Lucia-low-res.pdf

[23] TRAMIL Program of Applied Research to Popular Medicine in the Caribbean http://www.tramil.net/en

[24] Saint Lucia Forests and Land Resources Development Department (2015), Management Plan for

Saint Lucian Lansan 2015-2025

[25] Ibis

[26] It is sold in Saint Lucia for a median price of US7.00 per pound or US3.20/kg

[27] Decision adopted by the Conference of The Parties to the Convention on Biological Diversity, XII/7. Mainstreaming gender considerations, 2014 https://www.cbd.int/doc/decisions/cop-12/cop-12-dec-07-en.pdf

[28] Representatives from the Competent National Authorities, check points, permitting authorities and agencies responsible for related aspects such as trade, finance, education and knowledge management, gender and community engagement.

[29] National Environmental Information System (NEIS) of Saint Lucia https://www.neis.govt.lc/#

[30] News report https://www.wkyt.com/content/news/Kentucky-Reptile-Zoo-breeds-rare-island-viper-390928211.html

[31] Fauna and Flora International https://www.fauna-flora.org/news/why-conserve-a-killer

[32] https://icp.ucr.ac.cr/en/substantive-activities/research/lines-research

[33] Daltry, J.C. (2009) The Status and Management of Saint Lucia?s Forest Reptiles and Amphibians. Technical Report

No. 2 to the National Forest Demarcation and Bio-Physical Resource Inventory Project, FCG International Ltd,

Helsinki,
Finland https://www.researchgate.net/profile/Jennifer_Daltry/publication/261133149_Biodiversity_Assessment_of_Saint_Lucia's_Forests_With_Management_Recommendations/data/0deec53342d78bbd6b000000/Daltry-2009-Biodiversity-Assessment-Saint-Lucia-low-res.pdf

[34]
https://www.abscaribbean.org/sites/default/files/Business%20Model%20for%20ABS%20in%20the%20Caribbean%20Region.pdf

[35] http://www.saintlucianplants.com/localuses/cecrschr.html

[36] https://www.sluncf.org/copy-of-call-for-proposals

[37] https://www.competecaribbean.org/

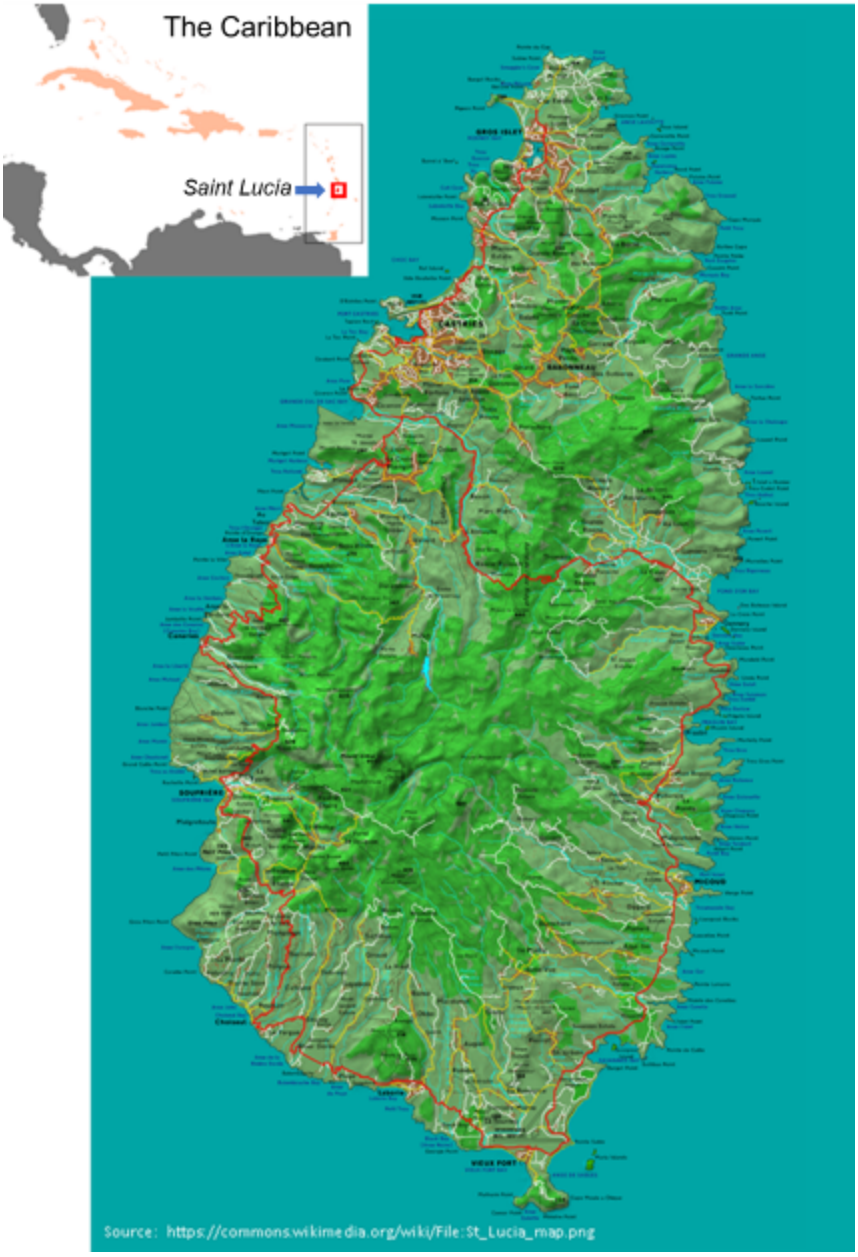
[38] Division of Gender Relations: A Gender Assessment ? ADDENDUM TO THE SAINT LUCIA REASAP 2020-2028

[39] Graveson (2019) Plants of Saint Lucia http://www.saintlucianplants.com/endemics.html

[40] The system can be accessed at https://www.neis.govt.lc/

1b. Project Map and Coordinates

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



Refer to Annex E for the distribution ranges for the St. Lucia Viper and lansan tree, forest reserves (protected areas) and districts (target areas under project).

1c. Child Project?

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

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Throughout the preparation of the project proposal, stakeholders have been consulted, both in groups and individually in gathering information to identify challenges that could potentially hinder the realisation of intended results. The consultations provided the opportunity to actively provide inputs in the formulation of the project, agree on the national organizational structure for project implementation and determine the budgetary requirements for successful implementation of the project activities. Due to the COVID-19 pandemic travel restrictions, initial participation activities were hosted virtually; the remainder of the consultations were hosted in face-to-face meetings or mixed in person and online modes. The consultations led to finalization of project priorities, where expertise on in-country utilization of biological resources and outlook on priorities guided the definition of the project output and activities. The priorities of the stakeholders were considered during these consultations and the budgetary allocations and capacity building components of the project reflect those considerations. The project will support key stakeholders, especially the CNAs with the necessary training, equipment and technical support to meet project objectives and improve institutional capacities to deliver on the project and the requirements of the Nagoya Protocol.

The main project stakeholders are those listed in the stakeholder Table 1 below. They include government agencies, non-governmental organizations, communities and community-based organizations and the private sector. A stakeholder engagement plan has been elaborated in Annex R that outlines the context, the stakeholder analysis, principles and methods of engagement over the course of project implementation. All stakeholders involved in the project design will remain engaged in project implementation with the Departments of Forestry, Department of Sustainable Development and the Ministry of Agriculture having major key policy and technical lead roles in implementing the project. During project implementation, stakeholder roles will vary depending on the organizational mandate and level of engagement in the project that could range from participation as members of the project coordination committee to roles as executing partners for key project activities. Stakeholders will also play key roles in the facilitation of local project events as part of the awareness raising activities under Component Four, as well as provide policy and technical expertise where necessary. Based on consultations with partners during the project development (PPG) phase the project anticipates that overall, some 1,100 persons, with relatively even gender distribution (600 female and 500 male) will be direct beneficiaries from the project intervention. This includes those

engaged in the policy and institutional reforms and management of the ABS protocols, conservation of biodiversity in the country, recipients of the grant awards in support of enterprise development and their dependents, researchers, medical practitioners, students and community members.

Confirmation of co-finance contributions were sought from partner organizations to support the project and affirm pledged contributions at the PIF phase.

Following UNEP?s guidelines, a Stakeholder Engagement Plan has been included as Annex R. It is pointed out that the engagement of stakeholders was a continuous and ongoing exercise during the PPG phase and will continue during project implementation. Also of note was the application of the Safeguard Risk Identification Form (SRIF; Annex P) as a screening tool to identify, risks, associated with the implementation of the project as well as to determine the extent to which any marginalized persons, women and other social and environmental issues would be impacted by the project. The Stakeholder Engagement Plan outlines communication needs to ensure continued stakeholder engagement, as well as the timelines for communication, The plan also includes a Grievance Mechanism under the PCC in the event of disputes relating to the implementation of the project. At Project Inception the Stakeholder Engagement Plan will be reviewed and validated. Project Stakeholders and their roles in project implementation is presented in Table 1 below and the list of stakeholder meetings is presented in Annex R.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Table 1. Stakeholders and Project Roles

Stakeholders	**Current Roles**	**Roles in Project Implementation**
Sustainable Development Department	Supervise the overall project development process, provide policy, technical and other contextual guidance in proposal formulation.	*Project focal point*. The DSD will lead coordination of and direction of stakeholder inputs in the development process and overall project execution

Stakeholders	Current Roles	Roles in Project Implementation
Forestry Department	Focal point on Lansan and Saint Lucia Viper information. Key contributor to project design.	*Partner, stakeholder and co-financer.* Key project partner in implementation of Component Three of the Project
Fisheries Department	Contribute to design of project activities of relevance to sustainable management and use of marine biodiversity and implementation of relevant blue economy initiatives.	Key project partner in providing technical inputs into activities involving the marine environment and permitting for marine research
Department of Agriculture (including the Agriculture Research, Extension and the Vet and Livestock Divisions)	Contribute to project design with data provision on critical species and permitting requirements for persons doing agricultural research	*Partner, stakeholder and co-financer* Contribute to design of project activities that enhance policy formulation and technical delivery related to potential utilization of biodiversity to support agri-based livelihood options.
Ministry of Commerce	Consultative inputs in project design related to investment, trade and industry competitiveness.	*Stakeholder* Provide expertise in areas related to Component Three on the business development pilots.

Stakeholders	Current Roles	Roles in Project Implementation
Ministry of Health	Consultative inputs in project design in human health protection.	*Partner, stakeholder and co-financer* Key partner in the discussion on health and safety related to the Saint Lucia Viper conservation and use of medicinal plants and health implications for cosmetic research
Division of Gender Relations	Consultative inputs in project design in ensuring gender considerations are appropriately captured	*Stakeholder* Provide technical expertise in ensuring gender considerations are manged well throughout project implementation
Attorney General?s Chambers	Consultative inputs in project design related to legislative enhancement.	*Partner, stakeholder and co-financer* Key partner in implementation of Component One
Saint Lucia National Trust (SLNT)	Consultative inputs in project design related to stakeholder engagement and advocacy on natural resource conservation	*Partner, stakeholder and co-financer* Key partner in implementation of Component Three with the anticipated pilots.
Saint Lucia Bureau of Standards (SLBS)	Consultative inputs on project design related to standards in goods, services and practices in protection of the health and safety of consumers and the environment.	*Partner, stakeholder and co-financer* Provision of technical expertise as needed throughout project implementation

Stakeholders	Current Roles	Roles in Project Implementation
Lansan harvesters and incense processors	Consultative inputs on project design related to beneficiary requirements in terms of capacity building and micro-business development and safeguarding traditional knowledge.	*Stakeholder* Key beneficiary stakeholders in implementation of Component Two and Three as beneficiaries and experts in the extraction and processing of Lansan Resin
Desbarra, Au Leon, Millet, Anse la Raye communities	Consultative inputs in project design related to expanding potential economic livelihood opportunity from venom extract of the Saint. Lucia Viper, species conservation, reducing human-wildlife conflict and safety.	*Stakeholder* Key beneficiary communities that can provide assistance under Component Four in raising awareness and implementing recommendations regarding the Saint Lucia Viper
Saint Lucia Medical & Dental Association (SLMDA)	Consultative inputs on project design related to development of local capacity for medical applications of Saint Lucia Viper venom extracts.	*Stakeholder* Technical experts to provide support to implement Component Three
Saint Lucia National Conservation Fund (SLNCF)	Consultative inputs to the project design related to financing access for small enterprise development on use of genetic resources and development of an appropriate financing window under the national fund.	*Partner, stakeholder and co-financer* Key implementation partner for Component Three particularly as it relates to the administration of the grant mechanism
St Lucia Chamber of Commerce, Industry & Agriculture Saint. Lucia Industrial and Small Business Association (SLISBA)	Private sector inputs to project design related to options for small business development stimulation and provision of guidance on avenues for heightened advocacy and awareness raising among private sector interests.	*Stakeholder* Key project stakeholders in supporting activities under Component Three

Stakeholders	Current Roles	Roles in Project Implementation
Saint. Lucia Manufacturers Association (SMA)		and Four in relation to the development of pilot projects and the dissemination of public awareness materials
Organisation of Eastern Caribbean States (OECS Commission)	Consultative inputs in project design related to promotion of regional integration on sustainable biodiversity management. The Commission is collaborating with the GIZ on advancing the ABS agenda in the OECS Sub-region.	*Partner, stakeholder and co-financer* Key project implementing and co-financing partner for the project
International Union for Conservation of Nature; Regional Office for Mexico, Central America and the Caribbean (IUCN-ORMACC)	Consultative inputs in project design related to experiences from the Regional GEF-ABS Project, policy design, ABS protocols development, capacity building and training. IUCN-ORMACC has been identified to lead the development of the project proposal under the PPG phase (and further designated by the GOSL as the project executing agency).	*Executing Agency, stakeholder and co-financer* Key Implementing partner for project management and execution according to established goals and outcomes.
Clodomiro Picado Institute (CPI)	Contribute project design inputs on activities to boost local capacity to research and document genetic resources, train professionals in researching the medicinal use of the venom of the Saint. Lucia Viper.	*Partner, stakeholder and co-financer* Key implementing partner under Component Two with regards to the activities relevant to the Saint Lucia Viper
Kentucky Reptile Zoo (KRZ)	Consultative partner during the project design process related to the venom of the Saint. Lucia Viper and ABS protocol development.	*Partner, stakeholder and co-financer* Key implementing partner under Component Two with regards to the activities relevant to the Saint Lucia Viper, They are also a co-financing partner for the project.

Stakeholders	Current Roles	Roles in Project Implementation
Deutsche Gesellschaft f?r Internationale Zusammenarbeit GmbH (GIZ)	Consultative inputs on project design related to ABS regionalization linked to cooperation with the OECS Commission in the OECS sub-region.	*Stakeholder* Support partner with expert knowledge to be used as needed throughout the project.
Fauna and Flora International (FFI)	Consultative inputs on design of the enterprise development aspects around commercial extraction and use of the lansan tree resin extract.	*Partner, stakeholder and co-financer* Key Experts to provide guidance on activities to be completed under Component Two and Three as required.
Sir Arthur Lewis Community College (SALCC)	Consultative inputs on project design related to the development of the training program for capacity building under Component Two	*Partner, stakeholder and co-financer* Key implementing partner under Component Two
The Folk Research Centre (FRC)	Consultative inputs on project design related to inclusion of traditional knowledge	*Stakeholder* Key Expert agency to provide guidance and input during execution of component Three and the permitting system being developed.
Eden Herbs	Consultative inputs on project design related to potential for medicinal plant species	*Stakeholder* Key expert stakeholder under Component Three for pilot development and blue/green economy business development
Inter-American Institute for Co-operation on Agriculture (IICA)	Consultative inputs on project design related to agriculture, funding mechanisms and NGOs	*Partner, stakeholder and co-financer*. Expert agency for provision of key guidance under Component Three, Co-financing partner for the project

Stakeholders	Current Roles	Roles in Project Implementation
The Coalition of Civil Societies	Consultative inputs on project design related to small business enterprises and community involvement in the project	*Stakeholder* Key stakeholder under Component Four in disseminating information to communities
The Saint Lucia Development Bank (SLDB)	Consultative inputs on project design related to the business case development	*Stakeholder* Key stakeholder under Component Four in offering sustainable financing options for sustained project outcomes.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier; Yes

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

A gender analysis has been completed for the project and presented in Annex Q. The following outlines the issues that have been considered as part of the gender assessment for the project.

It has been noted that in Saint Lucia genetic resources are used more frequently by rural women and variously by persons with disabilities, on a small scale to sustain livelihood activities. The project will ensure gender and gender equality is considered in all components. One area that will be addressed is reviewing of these livelihood activities traditionally led by women who may be aware of the value of the traditional knowledge they possess but are disadvantaged by lack of access to finance and other opportunities for economic empowerment that otherwise restricts them from significantly capitalizing on the use of these resources. The project will utilize gender and sex-disaggregated indicators to track equitable participation at both policy and technical levels and track the degree to which there are

equitable accrual of benefits to stakeholders. This will be particularly relevant to the livelihood support elements of the project, particularly under Component Three where emphasis will be on implementing and operationalizing procedures around the Prior Informed Consent and Mutually Agreed Terms that safeguards holders of traditional knowledge and ensuring that communities derive benefits, with key focus on marginalized segments of the community. The project considers risks and limitations in respect to achieving gender balance in the safeguards risk assessment and the stakeholder engagement plan (Annexes P and R). These considerations will continue to be addressed not only during project implementation, but also in realizing long term sustainability of the project. The project will create conditions whereby communities most affected by illegal access to genetic resources will be given a seat at the table assuring empowerment of rural women and small-scale farmers, and other users of genetic resources. To ensure integration of the gender equality concerns, the Department of Sustainable Development engaged the services of the Division of Gender Relations to guarantee gender considerations are appropriately built into the project.

Saint Lucia does not have an overarching gender equity policy but in 2019 commenced the process with the engagement of the UN Economic Commission for Latin America and the Caribbean (ECLAC), who through the provision of technical expertise is guiding the development of a gender policy for Saint Lucia. It is anticipated that this work will have been sufficiently advanced by the beginning of this project, such that this project may uptake key guidance and approaches in enhancing gender equity into each component based on the strategy outlined in the policy. This gender policy is intended to focus on governance, capacity building, health, gender-based violence and climate change. Other studies that have identified the important link between gender and the environment which have been completed for Saint Lucia include a study on gender and ecosystems management, gender and climate change as well as gender and disaster risks. These reports show the importance of women to sustainable environmental management and the potential or existing roles women play in the management of biodiversity. In this regard, across all components of the project special attention will be paid to ensuing that gender-sensitive approaches are applied and that knowledge generated is accessible and used effectively by beneficiaries, women, and disadvantaged groups in rural communities for whom ABS safeguards can be accrued. The Cabinet of ministers approved establishment of a national gender focal point system to facilitate gender guidance on the work of Government within the various ministries. The Department of Sustainable Development will have two persons serving as focal points and they will provide guidance on gender mainstreaming as required during project implementation.

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

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

4. Private sector engagement

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

In Saint Lucia there is a vibrant community of micro and small business enterprises that are reliant on the harvest and conversion of local biodiversity into a range of speciality food and beverage products, nutraceutical products, home and health care products and other derivatives. While there are some prominent long-standing businesses, the large majority tend to be informal, subject to constraints of financing to bring to scale and ready access to markets. Some of the more formalized businesses receive support benefits via membership in organizations such as the St Lucia Chamber of Commerce, Industry & Agriculture, Saint Lucia Industrial and Small Business Association (SLISBA) and the Saint Lucia Manufacturers Association (SMA) through which government incentives and concessions can be facilitated. Lending services are available through commercial banks, however given the rather higher risk profile of agribusiness and similar type enterprises, many of these businesses tend to be supported through smaller credit institutions such as credit unions and other informal means. In line with its mandate, the Saint Lucia Development Bank offers concessional financing for agribusinesses and start-ups in the natural resources extractives sector. More recently the Saint Lucia National Conservation Fund (SLUNCF) has opened up opportunities for alternative financing for livelihood support with philanthropic assistance from private sector (local hospitality and retail sectors) combined with capitalization from international donors.

The project, defined by its stakeholder engagement plan, will build on these existing relationships and investment pathways in supporting and facilitating investments under Component 3. The use of some floral species for medicinal and cosmetics processes is currently being undertaken to some extent in the private sector, however developing such businesses for larger markets has not been widely undertaken in Saint Lucia. Consultation with the private sector confirms interest to explore potential benefits that can be derived from ABS-related industry development especially as it relates to the business development component of the project. Work under the project is anticipated to lend a direct line of support for expansion of investment opportunities with the lansan extracts among other commodities, identified in a profiling exercise for potential business support via a grant scheme to be rolled out under the project. With respect to securing ABS arrangements for maintaining ex-situ specimen collections and accessing venom extracts from the Saint Lucia Viper, the project will demonstrate public-private sector participation through engagement of the Kentucky Reptile Zoo (as an externally-based private sector partner) with the wider joint cooperation with the Caribbean Doctors Association (also private sector) and the Clodomiro Picado Institute (state institution of Government of Costa Rica). A clear pathway for ensuring eventual accrual of benefits through the ABS arrangements will be defined under the project.

Further information on private sector engagement is provided in the stakeholder engagement plan where the private sector will primarily be engaged in the implementation of Output 3.2.3 which

provides for the creation of a financial support mechanism and the provision of incentives via grants to eligible entrepreneurs participating under the project, to encourage investment in cottage industries utilizing genetic/biological resources as livelihood activities. The grant mechanisms will be based on business and marketing principles, and specifically developed for applicants under the project. In the development of business plans and the grants mechanism, the private sector will be consulted and engaged in the context of product development and market access opportunities to facilitate the uptake of ABS in relevant livelihood activities. To ensure buy-in, the project will invest in awareness and engagement sessions during project implementation, with the role of the private sector accorded priority.

5. Risks to Achieving Project Objectives

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

Table 2. Assessment of Risks Associated with the Project and Proposed Mitigation Measures

Risk	Risk level	Mitigation Measures
Uncertainty due to government shifts in priorities and policy changes; inadequate political-level buy-in	Medium	The project will seek to gain commitment through expanded awareness among stakeholders including decision makers, institutions, private sector and communities in recognition of the potential for livelihood opportunities through ABS arrangements in the interest of safeguarding and conservation of biodiversity while contributing to enhanced economic benefits. The issues of biopiracy and the economic benefits of sustainable ABS agreements will also be communicated to decision makers and other stakeholders to secure commitment to the project?s implementation
Limited institutional and community capacity and interest in ABS issues	Medium	The project will strengthen capacity of stakeholders through provision of access to tools and demonstrations on application of such tools and resources to support decision making and facilitate ease of execution of mandates

Risk	Risk level	Mitigation Measures
Occurrence of natural and climate change-induced hazards (particularly hurricanes)	Medium -High	The project will include hazard risk management approaches in design and execution that will be otherwise mainstreamed in developed national frameworks. Given the background risk of potential impact from destructive storms and hurricanes both the public and the private sector have put in place measures to strengthen resilience of their administrative and business continuity processes to address disruptions caused by hurricanes; These include data management systems with redundancy and recovery measures in place. This best practice approach will also be adopted by the project to safeguard information and continuity of the project in the event of such occurrences. The project will be adaptively managed utilizing the monitoring and evaluation process to assess impacts in the event of a hurricane or other natural disaster related interruptions.
Stakeholder apathy	Low-Medium	The project has sought to ensure inclusion of a comprehensive stakeholder education programme based on messaging that underscores benefits for participation and investment. Under Component Four, the design and implementation of the communications and outreach strategy will be core to raising awareness, reducing stakeholder apathy and creating buy-in.
Lack of private sector participation	Medium	The project will establish working relationships with private sector groups and cooperatives to gain inputs, maintain buy-in and active participation over the course of the project. Continuous communication with relevant private sector entities, particularly as it relates to Outcome Three will be undertaken through the life of the project. Engagement as outlined in the stakeholder engagement plan will be critical to manage this risk during the project.
Imposition of COVID19 transmission mitigation measures (if crisis situation persists) and associated disruptions; challenges potentially related to post-pandemic economic recovery in terms of changing policy and priorities, personnel and material deployment	Medium	As the fallout from the COVID19 pandemic subsides, the lingering impacts to the public and private sector business processes are lessening. With resumption of international travel there has been return to normalcy for consultant and other procurements will be reduced. The pandemic has had implications for resource deployments at the government level, along with the other project partners in response to the economic fallout, that have had prolonged impacts in terms of implementation and co-financing commitments, but this influence has been decreasing. The GEF COVID19 guidance on project design was followed in assessing and designing to account for critical issues including *inter-alia*, possible re-instatement of COVID-19 containment measures, change in capacity of stakeholders, changes in the baseline, change in conditions of beneficiaries and processes for stakeholder engagement.

Risk	Risk level	Mitigation Measures
Lack of investment into commercialization of biodiversity pilots	Medium	It is anticipated that project execution will lead to the identification of products that could be further investigated for commercialization either for medicinal or cosmetic purposes. However, due to the time it takes to move from identification of resource to production of derived product, it is possible that the anticipated results from the pilots would not manifest by project end. To alleviate such risk, the project will seek invest in pilots with products that have shown potential for commercialization and are already being explored nationally by persons in the industry.
Inability to realize favourable outcomes of the piloted gender-balanced community enterprises supported by the grant mechanism during the time span of the project	Medium	The project will initiate required preparatory work under Output 3.2.1 in accordance with the workplan from project inception so that the maximum amount of time can be allocated to assess the efficiency of the approaches chosen and to gauge success of these pilots.

6. Institutional Arrangement and Coordination

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

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

Project Executing Agency: The International Union for the Conservation of Nature, Regional Office for Mexico, Central America and the Caribbean (IUCN-ORMACC) will perform the role of Executing Agency. This decision was made by the GOSL, which has adopted a collaborative approach with partners to facilitate execution of the myriad of initiatives on sustainable development in the country. This is due in part to resource constraints but is also the government?s approach to strengthening networks for collaboration with regional and international partners.

Project Management Unit: A Project Management Unit (PMU) will be established by IUCN-ORMACC under the supervision of the Department of Sustainable Development, to undertake day-to-day management of the project and be responsible for all technical and financial reporting. The PMU will be mostly based in Saint Lucia and will be responsible for fiduciary oversight and reporting of the project, including financial management and procurement consolidation according to the project?s operational manual and procurement plan. It is also responsible for monitoring and evaluation (M&E), providing and coordinating technical advice, and coordinates and assists with overall project focus concerning project strategies, criteria and methodologies. The PMU will be staffed with a Project Coordinator and an Administrative Assistant. The latter will provide support from Costa Rica. The Administrative Assistant needs to be based in the IUCN-ORMACC offices in Costa Rica as the majority of the position?s key duties cannot be performed from abroad as it requires handling of administrative related paperwork for internal review and approval processes which imply printing, delivery and follow up of the same with relevant IUCN staff. However, when deemed necessary, the project will ensure administrative/logistical support to staff based in Saint Lucia via the provision of professional services. One representative of the Department of Sustainable Development together with IUCN staff will take part in the recruitment process of the PMU staff and decide about the most suitable candidate for each position according to IUCN recruitment procedures. The PMU Project Coordinator will have a double reporting line (IUCN and the Department of Sustainable Development). The administrative support and financial management and procurement services will be provided directly by IUCN-ORMACC, and technical delivery of project outputs will be complemented by IUCN experts? backstopping, other relevant national government agencies and specialist consultants on an as needed basis. The PMU will ensure annual financial audits of expenditure are conducted and contribute to the mid-term review and terminal evaluation, with engagement of the beneficiary stakeholders

National Coordinating Committee: The project will be directed by a National Coordinating Committee (NCC) comprised of core agencies that serve as national competent authorities, *inter-alia* the Ministry of Agriculture, Department of Forestry, Department of Fisheries, Department of Cooperatives, Division of Gender Relations along with other support agencies including the Ministry of Health, the Saint Lucia Bureau of Standards, Saint Lucia National Trust, the Attorney General?s Chambers, and the Saint Lucia Manufacturers Association. The NCC will establish technical working groups (TWGs) as needed to provide technical guidance on thematic areas in accordance with defined terms of reference. The Division of Gender Relations, as the primary technical resource on gender affairs, will form part of all these groups to ensure gender mainstreaming is considered across all project activities. These technical working groups will be constituted in as far as possible within existing institutional arrangements to ensure mainstreaming. The NCC will convene on a quarterly basis to review workplan execution and reporting outputs, decide on project directions and integration within national frameworks. The committee will also execute the following functions:

? Provide input into planning and coordination of the project;

? Review and approve project policies and procedures in a manner that ensures gender mainstreaming under project activities;

? Review and approve Annual Operational Plans and Budgets at the beginning of each fiscal year, to allow for smooth project execution through-out the rest of the fiscal year

? Review the progress of the project and ensure activities are in line with approved annual operational plan and budget;

? Review and approve all project technical and financial reports (quarterly, semi-annual reports, PIRs, and audited financial statements);

? Ensures that required resources are committed and arbitrates any conflicts within the project or negotiates a solution to any problems between the project and external entities

? Promote partnerships with relevant government ministries/agencies/departments for monitoring and execution of the project;

? Facilitate the coordination of project financed activities with other related investments and institutions in Saint Lucia where applicable;

? Ensure accountability by making decisions in accordance with standards that ensure management brings about development results, best value for the money, fairness, integrity, transparency, gender equality and effective international competition

The PSC shall appoint as required, technical working groups (based on agreed TORs) to oversee and ensure technical quality of outputs.

UNEP in the capacity as Implementing Agency will have a seat on the NCC and be recipient of substantive technical reports (half-year, and annual Project Implementation Review reports) and quarterly financial reports. The work of the NCC will be disseminated through the national public awareness program associated with the project with opportunity for stakeholder and community consultation. The NCC will be chaired by the DSD. The project?s overall Institutional and Implementation Structure is presented in Figure 3 below.

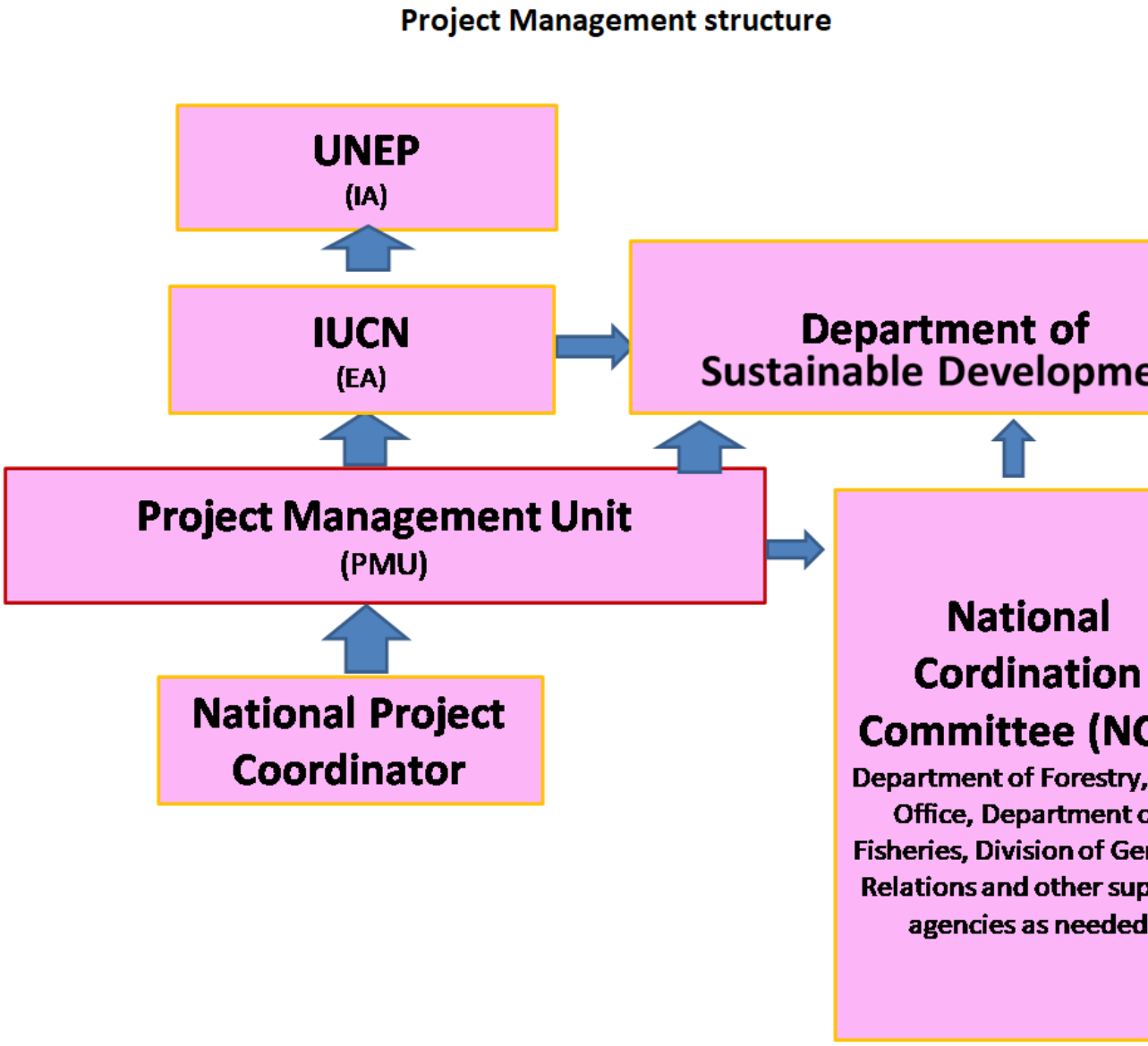


Figure 3 Project management structure

Coordination with other relevant GEF-financed projects and other initiatives

(**1**) *GEF Increase Saint. Lucia's Capacity to Monitor MEA Implementation and Sustainable Development a National Environmental Management System (NEIS)*: This project was intended to strengthen institutional capacity for the implementation and monitoring of international conventions as a follow-up to the National Capacity Self-Assessment (NCSA) of Saint Lucia and to better integrate environmental concerns, and the value of ecosystems, into its broader development frameworks. The project developed a data management platform to generate, access and use information and knowledge for both policy development and planning

and for monitoring and evaluating environmental impacts and trends. It provided national institutions and stakeholders tools and methodologies to better coordinate existing knowledge and to generate new information on the state of the environment, such as indicators for sustainable development, and to track and monitor environmental trends and changes, to improve environmental management. The project contributed to strengthening stakeholder capacities for management and implementation on convention guidelines. It has also provided the foundation for the development of the electronic ABS permitting system under this project.

(2) *GEF-World Bank Caribbean Regional Ocean Scape Project (*CROP) aims to move countries of the Eastern Caribbean towards a blue economy. The project, funded in 2017, was formulated out of the Eastern Caribbean Regional Ocean Policy (ECROP) and its associated strategic action plan (ECROP SAP) that was endorsed by the OECS Heads of Government in 2013. The ECROP guides the future use of the region?s marine waters and provides a basis for enhanced coordination and management of ocean resources within the Eastern Caribbean. Component Two of the project focuses on Innovative Ocean Wealth Tools, Institutional Strengthening and Capacity Building to support better decision-making over transitions to a blue economy. This has potential alignment under sub-component 4 to ABS and enhancing biosafety in Saint Lucia as pertains to blue economy opportunities in use of biodiversity resources in the marine environment. Component One of the project had as its outcome ensuring access and rights to utilize marine resources are secured by countries. As a result, Saint Lucia developed a national ocean policy and strategic plan that highlights the importance of ABS and stresses the country?s commitment to efficient environmental governance and ecosystem management across the island. The awareness promoted and the partnerships built among governmental departments during the process of the project?s implementation as well as the development of this policy and strategic plan will be built on and utilized under this ABS project.

7. Consistency with National Priorities

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

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

Saint Lucia has in place policy and regulatory provisions for protection and sustainable use of its biodiversity. These are enshrined in various laws, associated regulations and the institutions that have been charged with the mandate for policy execution and legal/regulatory compliance. Since 2005 Saint Lucia has been a Party to the Cartagena Protocol on Biosafety and the Convention on Biological Diversity. As a result, the issues of biosafety and ensuring access and equitable benefit sharing have become more prominent in implementation of the National Biodiversity Strategy and Action Plan (NBSAP). This increasing prominence has been associated with recognition of the threats to indigenous biodiversity that may be posed with introduction of living modified organisms, invasive alien species and the recognition that policy and regulatory responses in these contexts are weak. Utilization of biodiversity and traditional

knowledge particularly by external commercial interests has been gradually drawing attention in terms of how benefits accrued can be repatriated back to the country and communities that otherwise bear responsibility for protection of these resources. Biodiversity management currently underscores five of the seven objectives of the *National Environmental Policy and National Environmental Management Strategy (NEP/NEMS)* of 2004 and it is featured in the draft National Policy and Strategic Plan for the Agriculture Sector and the draft policy on Science and Technology for Development.

The *National Biodiversity Strategy and Action Plan (NBSAP)* that was initially adopted by the government in 2001 and revised most recently in 2018[41], features the following objectives: (i) conserve the country?s biodiversity; (ii) promote sustainable use of these resources; (iii) encourage the equitable distribution of benefits derived from the use of biodiversity; and (iv) facilitate the participation of people and institutions in the management of biodiversity. The revised national strategic goals and targets for biodiversity management based on the revised 2nd NBSAP lists the following goals and targets of relevance to ABS:

? Goal 1: To internalize and integrate biodiversity values into decision making and national accounting to stimulate/advance national development; *Target 1.5: Traditional knowledge, innovations and practices of local communities relevant for the conservation and sustainable use of biodiversity are integrated into relevant decision-making processes such as national and sectoral plans, programmes, policies with full and effective participation of local communities at all relevant levels.*

? Goal 2: To generate benefits for all citizens from biodiversity and ecosystem services for improved human wellbeing; Target 2.3: By 2015, appropriate systems to make the Nagoya Protocol on Access to Genetic Resources operational and the Fair and Equitable Sharing of Benefits Arising from their Utilization, for all citizens, especially for women, youth and other vulnerable groups are established and functional.

? Goal 3: To encourage and effect sustainable management and use of biodiversity and genetic resources; Target 3.5: Agriculture, fisheries including aquaculture and forestry biological resources are conserved, restored and sustainably managed and the GMOs/Living Modified Organisms (LMOs) are effectively managed to minimize genetic erosion and safeguard genetic diversity.

? Goal 4: To engender behavioural change through knowledge management and capacity building for sustained implementation; Target 4.3: The National Clearing House Mechanism (CHM) is made operational and functional as the means for development of systems for policy, scientific and technological knowledge sharing, transfer, and application for effective management of biodiversity; Target 4.4: Appropriate systems and measures for the documentation and protection of traditional knowledge,

practices and innovations related to biological resources are in place and subject to national legislation for societal use.

Saint Lucia, along with countries of Latin American and Caribbean region adopted the *Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean or the ?Escaz? Agreement?* in 2018. The Agreement seeks to ensure rights associated to access to information, citizen participation and access to justice in environmental matters based on Principle 10 of the 1992 Rio Declaration on Environment and Development. The Agreement develops these three rights and aims to promote better governance of natural resources in the region and lends further strength to the national enabling framework for ensuring access and benefit sharing particularly in the context of deepening civil society engagement in related matters of governance in safeguarding biological resources and societal benefits. Saint Lucia ratified the agreement in December 2020.

The *National Ocean Policy and Strategic Plan 2020-2035* under subsection 3.8 highlights the importance of ensuring access to common ocean resources for private profit should be priced to give a fair and equitable rate of return for national and local benefit. Governance of access to ocean resources should reflect the national and community interest and short and long-term economic, environmental, social, and cultural costs and benefits.

United Nations Cooperation Framework: The United Nations coordinated support to Saint Lucia is under a *UN Multi-Country Sustainable Development Framework (MSDF)*. The 2012-2026 UN MSDF in the Caribbean[42] includes Priority Area 3 ?Resilience To Climate Change And Shocks And Sustainable Natural Resource Management? which is relevant to the objectives under this project. Under this priority area the UN system will support coherent efforts to strengthen the resilience of the Caribbean and its peoples by mitigating the effects of climate change, disasters and environmental degradation in the context of sustainable development, livelihoods, and the economies. The anticipated relevant outcome is Outcome 6 ?Caribbean countries manage natural resources and ecosystems Strengthening their resilience and enhancing the resilience and prosperity of the people and communities that depend on them?.

The Office of the UN Resident Coordinator with responsibility for Saint Lucia covers Barbados and the Eastern Caribbean. The UN Country Team is based in Barbados and includes within the network, UNEP?s Caribbean Sub-Regional Office (CSRO). UNEP participates in the UNCT and works to ensure UNEP-led initiatives align with the Country Implementation Plan and the relevant Multi-Country Sustainable Development Framework (MSDF). During project implementation, UNEP?s CRSO based in Jamaica will be kept in close communication to facilitate as relevant and necessary, avenues for building synergies between related initiatives. The CSRO will be furnished with key reports that will include *inter-alia*, annual

progress implementation reviews, mid-term reviews and terminal evaluation reports for feedback particularly related to ensuring coherence with wider UN-led initiatives within the Caribbean region. The UN Resident Coordinator's Office has been advised in parallel with the formulation of the project and feedback will be incorporated into further drafts of the project documentation and appropriately incorporated into governance arrangements at implementation.

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[41] Revised Second National Biodiversity Strategy and Action Plan (NBSAP) (2018 ? 2025) For Saint Lucia https://www.cbd.int/doc/world/lc/lc-nbsap-v2-en.pdf

[42] https://unsdg.un.org/sites/default/files/2021-11/Caribbean%20Multicountry%20Sustainable%20Development%20Framework_2022_2026_0.pdf

8. Knowledge Management

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

The knowledge management approach for the project will be guided principally by a Communications and Outreach Strategy that will be central to implementation of the activities on enhancing management of information associated with the operational requirements of the Nagoya Protocol in the country. The project will build out from the knowledge management approaches and contributions of the regional GEF UNEP-IUCN ABS Project and will entail the range of capacity building activities associated with the project, in addition to the suite of protocols that have been developed and are to be developed toward implementing the ABS framework in the country. The project will adopt a learning-by-doing approach through face-to-face and virtual means (taking into account possible reinstatement of COVID-19 management protocols if necessary). This approach will also ensure communication and knowledge management activities apply a gender sensitive approach with a balance of inputs from male and female public education developers and reviewers for products developed. Resulting products will incorporate use of gender-balanced images and gender sensitive language. The knowledge management approach will be facilitated by a network of capacity building collaborators nationally, regionally and internationally. The project will contribute to the development of an ABS information portal/clearinghouse that will serve as the primary repository for data to support regulatory functions and compliance, in addition to continued capacity building and dissemination of knowledge products for stakeholders developed under Component Four and the other project components. The CHM will be integrated within the National Environmental Management System that was developed under the GEF-funded project *Increase Saint Lucia's Capacity to Monitor MEA Implementation and Sustainable Development*. This knowledge hub will be operated by the Ministry of Sustainable Development. The knowledge hub and the modalities for bringing the ABS elements together in a coherent management will utilize some of the materials that have already been developed under the regional ABS project and incorporating these for dissemination as part of the substantive activities under Component 4. Other information sharing methods and material will be reviewed as well including consideration for promoting ABS issues among the rural women who are

currently involved in small scale livelihood activities involving biological resources. It is anticipated that some of these materials that have been developed and that will be developed will be articulated in Kw?y?l to ensure understanding and participation from all parties in Saint Lucia. This is especially important as there are older persons in Saint Lucia whose only means of communication is in Kw?y?l.

Knowledge outputs will be framed in alignment with global agendas, notably the Sustainable Development Goals, the Post-2020 Global Biodiversity Framework and the UN Decade for Ecosystem Restoration as appropriate and will be promoted in alignment with key commemorative days such as World Environment Day, International Day for Biological Diversity, International, Forest Day, World Food Day, World Intellectual Property Day and World Consumer Rights Day among others. The project will actively promote knowledge exchange and networking among policy and technical professionals, practitioners and other beneficiaries via special exchange events hosted in Saint Lucia and at events externally. In partnership with the OECS Commission and the CARICOM Secretariat special information sharing events will be convened at OECS Council of Ministers of Environment meetings and meetings of the Council for Trade and Economic Development (COTED). Knowledge exchange opportunities will be organized with the GIZ through its programme of support to the OECS Commission on ABS in the sub-region.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project will follow UNEP?s standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Table 3. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.

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

The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-?-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the Project

Coordinator to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

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

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-?-vis delivering the agreed project global Environmental benefits will be assessed with the Coordination Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

In line with the GEF Evaluation requirements and UNEP?s Evaluation Policy, any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Members of the Project Steering Committee could be interviewed as part of the MTR process and the Project Manager will develop a management response to the review recommendations along with an implementation plan. Results of the MTR will be presented to the Project Steering Committee. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.

All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review. In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review?s performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report. However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two

primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project?s operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

Table 3 Indicative monitoring and evaluation workplan

Type of M&E Activity	Responsible Parties	GEF Budget (USD)	Co-Finance in kind (USD)	Time Frame
Inception Workshop	IUCN Government of St-Saint Lucia - Department of Sustainable Development	15,000	2,000	Within 2 months of project start-up
Inception Report	IUCN	5,009	1,000	1 month after project inception meeting
Measurement of project indicators (outcome, progress and performance indicators) including baseline data collection	IUCN International and local Consultants (related project outputs under all components)	12,000		Outcome indicators: start, mid and end of project Progress/performance indicators: annually
Standard semi-annual progress reporting and monitoring to UNEP	IUCN	10,000		Within 1 month of the end of reporting period

Type of M&E Activity	Responsible Parties	GEF Budget (USD)	Co-Finance in kind (USD)	Time Frame
Monitoring by the Project Steering Committee and advisory technical group of environmental and social risks, and corresponding management plans as relevant	IUCN Government of St Lucia ? Department of Sustainable Development	15,000	4,000	Once a year minimum
Project Implementation Review (PIR)	IUCN	7,500	2,000	Annually, part of reporting routine
Mid Term Review/ Evaluation	UNEP	30,000		At mid-point of project implementation
Terminal Evaluation	UNEP	40,000		Within 6 months of end of project implementation
Project Final Report	IUCN	7,000	2,000	Within 2 months of the project completion date
Co-financing report	Government of Saint. Lucia ? Department of Sustainable Development IUCN	5,000	4,000	Within 1 month of the PIR reporting period
Project Closing Workshop	Government of Sain Lucia ? Department of Sustainable development IUCN	15,000	2,000	Within one month of project closure
Total M&E Plan cost		**161,509**	**17,000**	

10. Benefits

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

The Project will deliver social, economic and environmental benefits as a result of the envisioned technical assistance activities and the demonstration pilots envisioned. Over the last two decades, studies have highlighted the economic, social and cultural importance of biodiversity in general and non-timber forest products (NTFPs) in particular worldwide. Saint Lucia recognizes this importance with the Forestry Department noting NTFPs are utilized by many persons formally and informally as sources of income. Many of these value-traded NTFPs form the basis of local trade by individual entrepreneurs and small and medium-scale enterprises (SMEs). Though these are primarily used for food, and thus would not garner ABS interest, the likelihood of some of these products becoming viable commercial interest for ABS agreements cannot be ruled out. Many SMEs sell two or more NTFPs often alongside agricultural products, in quantities which provide a significant income. Among the highest valued and commercialized NTFPs in Saint Lucia are vanilla beans (*Vanilla planifolia*) (which is highly sought after by hotels and

other entities), mauby (*Colubrina elliptica*) (which is used to produce a local drink), latany? palm (*Coccothrinax barbadensis*) (used for making wines and brooms, bayleaf or bwaden (*Pimenta racemose*) (used in the cosmetics and tea making sectors) cut flowers, and the gonmy? (*Dacryodes excelsa*) used to make canoes and to light fires. Though the extent of the annual household income that these products provide is not known (and to be better determined under the project), these species provide augmented income for many persons in rural communities, particularly women. Other plants are utilized for their medicinal value in the local industry as well. However, while the local industry continues to grow, the country?s wealth in medicinal plants and NFTPs remains at potential risk of exploitation from biopirates without protection afforded by ABS arrangements. Not only is this a threat to the country?s biodiversity, but it could lead to unfair patenting of plant extracts by foreign interests, yielding potentially lucrative economic benefits but with little or no return to the country and local communities. The project therefore will help preserve and streamline the existing economic benefits derived from these products by individuals, companies and the relevant local communities.

Today, the private sector and small cottage industries, are exploiting these biological and genetic resources on a small-scale and there is potential to scale up these businesses to possibly bring a greater sharing of profits with the local communities, where benefits have the potential to improve their livelihood. Through Component Three, the project proposes to review possibilities for genetic resources with potential ABS application to be promoted for enterprise development, assisted by award of incentive grants. This valorization dimension, which will involve national entrepreneurs whose principal business operations centre around the commercial exploitation of special forest products, non-timber forest products, and medicinal plants will potentially bring greater value to these individuals and small business with special attention paid to enhancing gender equity. By implementing an enabling legal, fiscal and operational framework, ABS policy measures triggered by the project will enable the transfer of benefits to Saint Lucia through higher investments and remittance of royalties to local communities through the creation of business, and capacity building opportunities, afforded through access to premium value for local genetic resources.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification*

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

Measures to address identified risks and impacts

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

Please refer to Annex P

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
GEFID 10840 Saint Lucia ABS_Safeguard Risk Identification Form (for submission)	CEO Endorsement ESS	
CRC SRIF St Lucia ABS_clean	Project PIF ESS	

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

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Project Objective: To enhance the enabling environment to effectively implement the provisions of, and advance accession to the Nagoya Protocol within a harmonized institutional and intersectoral approach, and demonstration of replicable models for equitable access and benefit sharing (ABS)						
Component 1: Strengthen the national policy and legislative institutional framework for operationalization of the Nagoya Protocol for access and benefit sharing (ABS)						
Outcome 1.1: Competent National Authorities and stakeholders adopt a policy and legislative framework for the fair and equitable sharing of benefits arising from the utilization of genetic resources	(i) Number of ABS policy positions adopted by the Government of Saint Lucia (ii) Multi agency committee with responsibility for ABS established and operational	0 0	1 0	1 1	? Cabinet memorandum ? Final ABS Policy document ? BCSU Bill ?	? Stakeholder/regulatory agencies will make needed reforms required for effective ABS management ? Local partner agencies will dedicate resources to enhance capacity to deliver services associated with the project outputs ? Government will commit needed resources for maintenance of the ABS management protocols to maintain continuity ? Extreme climatic events should they occur will not be significantly
Output 1.1.1: *Existing policy on ABS finalized and submitted to Cabinet for consideration and adoption*	(i) Number of ABS policy position statements presented for adoption by the Government of Saint Lucia (ii) Number of stakeholder consultations	0 0	1 1	1 2	? Final ABS Policy document ? Cabinet memorandum ? Minutes of stakeholder consultations	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 1.1.2: *Draft Biodiversity Conservation and Sustainable Use Bill upgraded to include relevant ABS clauses and regulations to facilitate operationalization of the Nagoya Protocol for consideration by stakeholders and adoption by Cabinet*	(i) Number of updated and stakeholder approved legal instruments presented to Cabinet for endorsement (ii) Number of stakeholder consultations	0 0	0 2	1 2	? BCSU Bill and drafting instructions ? Cabinet memorandum ? Minutes of stakeholder consultations	disruptive during course of the project ? The COVID-19 pandemic impacts lessen over the course of the project and present no adverse impacts to the project
Outcome 1.2: Competent National Authorities and stakeholders adopt an administrative framework to efficiently operationalize ABS protocols nationally	(i) Number of adopted and actioned joint agency frameworks for ABS and biosafety by CNAs and other stakeholders (ii) Number of approved National ABS Protocols by CNA and stakeholders	0 0	1 1	1 1	? Administrative framework and protocol documentation	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 1.2.1: *Agency operational framework and management recommendations prepared for administration of the ABS framework within scope of BCSU Bill for integration by the CNAs and stakeholders within existing decision-making processes*	(i) Number of administrative frameworks and associated management protocol documents for CNAs (ii) Number of CNA workshops/stakeholder consultations	0 0	1 2	1 4	? ABS Administrative Framework documentation ? Minutes of workshop and stakeholder consultation proceedings	
Outputs under Component 1 Output 1.1.1: Existing policy on ABS finalized and submitted to Cabinet for consideration and adoption Output 1.1.2: Draft Biodiversity Conservation and Sustainable Use Bill upgraded to include relevant ABS clauses and regulations to facilitate operationalization of the Nagoya Protocol for consideration by stakeholders and adoption by Cabinet Output 1.2.1: Agency operational framework and management recommendations prepared for administration of the ABS framework within scope of BCSU Bill for integration by the CNAs and stakeholders within existing decision-making processes						
Component 2: Develop an effective permitting and monitoring framework for ABS protocols in accordance with provisions of the Nagoya Protocol						
Outcome 2.1 Strengthened institutional capacities among CNAs to effectively operationalize provisions of the Nagoya Protocol	(i) Number of monitoring and permitting systems for ABS adopted by CNAs and stakeholders. (ii) Number of staff of CNAs and other government institutions that have enhanced institutional capacity in applying ABS regulatory protocols	0 0	1 10	1 20	? Agency assessments/feedback	? Stakeholder/regulatory agencies will make needed reforms required for effective ABS management ? Local partner agencies will dedicate resources to enhance capacity to deliver services associated with the project outputs ? Government will commit

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 2.1.1 *Administrative protocol for ABS Agreements (with PIC, MATs, templates for applications/ contracts, manual), monitoring and permitting system developed for research and bioprospecting activities available for use by CNAs and stakeholders*	(i) Number of protocols detailing the ABS electronic monitoring and permitting system	0	1	1	? ABS Monitoring protocol documentation ? PIC and MAT templates	needed resources for maintenance of the ABS management protocols to maintain continuity ? Extreme climatic events should they occur will not be significantly disruptive during course of the project ? The COVID-19 pandemic impacts lessen over the course of the project and present no adverse impacts to the project
Output 2.1.2 *Suite of capacity building tools and resources developed on administration of the national ABS frameworks for use by at least 20 professionals and CNAs and key stakeholders*	(i) Number of training manuals/modules (ii) Number of training events on administration of the national ABS framework (iii) Number of CNA professionals and key stakeholders trained in certificate programme (50% female and 50% male)	0 0 0	1 1 10	1 3 20	? Curriculum package; training manual and resources ? Training records and feedback survey	
Outcome 2.2 National Environmental Information System provides functional capacity to serve CHM requirements for ABS protocols for use by CNAs and stakeholders	(i) Number of information platforms that fully incorporates CHM capability validated and meets requirements of CNAs and stakeholders	0	1	1	? System user feedback/reporting	? Stakeholder/regulatory agencies will make needed reforms required for effective ABS management ? The NEIS has the foundational capability required for integration of the ABS protocols associated with

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 2.2.1 *Upgraded National Environmental Information System that includes an ABS CHM platform developed for use by CNAs and stakeholders*	(i) Number of operational ABS CHM data management platforms (ii) Number of training events on use of the CHM Platform	0 0	0 1	1 2	? Operating NEIS system with ABS capacity and CHM capability ? User feedback survey on electronic permitting system ? Training reports and trainee feedback	permitting and content management of the CHM ? Local partner agencies will dedicate resources to enhance capacity to deliver services associated with the project outputs ? Government will commit needed resources for maintenance of the ABS management protocols to maintain continuity ? Extreme climatic events should they occur will not be significantly disruptive during course of the project ? The COVID-19 pandemic impacts lessen over the course of the project and present no adverse impacts to the project
Outputs under Component 2 Output 2.1.1 Administrative protocol for ABS Agreements (with PIC, MATs, templates for applications/ contracts, manual), monitoring and permitting system developed for research and bioprospecting activities available for use by CNAs and stakeholders Output 2.1.2 Suite of capacity building tools and resources developed on administration of the national ABS frameworks for use by at least 20 professionals and CNAs and key stakeholders Output 2.2.1 Upgraded National Environmental Information System that includes an ABS CHM platform developed for use by CNAs and stakeholders						
Component 3 Establish demonstrable commodity pilots to test operationalization of ABS protocols toward sustainable management and equitable benefits of genetic resources and scale-up in future commercial application						

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Outcome 3.1 Formal ABS agreement between the GOSL and partner for contribution to sustainable commercial use of the Saint Lucia Viper venom and demonstrated as a model for replication for other ABS applications	(i) Number of formalized partnerships between the GOSL and research development entity to grow opportunities for commercial and non-commercial bioprospecting. (ii) Number of Prior Informed Consent (PIC), Material Transfer Agreement and/or Mutually Agreed Terms (MAT) signed for use of the Saint Lucia Viper venom (iii) Number of professionals with capacity for diagnostic testing, handling and processing venom.	0 0 0	1 1 0	1 1 1	? Signed PIC/MAT agreements ? Population assessments ? Handling and safety guideline documents	? Public perception of Saint Lucia Viper conservation will be favorable ? Local partner agencies will dedicate resources to enhance capacity to deliver services associated with the project outputs ? Extreme climatic events should they occur will not be significantly disruptive during course of the project ? Government will commit needed resources for maintenance of the ABS management

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 3.1.1 *Memorandum of Agreement on technical collaboration between the GOSL and the Kentucky Reptile Zoo or and other potential partners and PIC and MAT agreements prepared on collaborative research and capacity building for bio-prospecting and institutional support related to use of venom of the Saint Lucia Viper*	(i) Number of formalized partnership agreements (ii) Number of PIC/MAT agreements signed on collaborative research	0 0	1 0	1 1	? Signed agreement documents (PIC/MAT)	protocols to maintain continuity ? The COVID-19 pandemic impacts lessen over the course of the project and present no adverse impacts to the project
Output 3.1.2 *Updated population assessment of the Saint Lucia Viper delivered to inform management approaches by the Forestry Department to facilitate sustainable resource use and enhance public safety*	(i) Number of scientific studies commissioned and completed (ii) Number of persons trained in viper population assessment and management	0 0	1 5	1 10	? Field survey data ? Population status report ? Training reports	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
***Output** 3.1.3 Exploratory assessment into the Saint Lucia Viper venom and its potential for commercialization*	(i) Number of agreements signed with research facilities to explore feasibility of pharmacological application of the Saint Lucia Viper venom (ii) Number of persons trained in snake handling protocols (iii) Number of diagnostic tests competed to determine antivenom efficacy based on snake venom from Saint Lucia (iv) Number of assessments of health facilities to determine capability to respond to snake bite emergencies.	0 0 0 0	5 1 1 1	10 1 1 1	? Handling and safety guideline documents ? Laboratory diagnostic test reports ? Health facility response assessment report ? Training resources and workshop reports	
Outcome 3.2 Enhanced business capacity for screening and commercialisation of genetic and bio-chemical compounds of biodiversity in Saint Lucia, in compliance with NP on sustainable utilisation of genetic resources	(i) Number of biological resources identified through genetic and/or chemicals screening towards potential commodity (development for food, medical, cosmetic or other applications) (ii) Number of small grant packages to eligible applicants. (iii) Number of plant germplasm banks	0 0 0	1 2 2	2 5 5	? Business case dossier ? Awardee portfolio performance reviews ? Germplasm bank establishment report	? Current and prospective research and commercial entities engaged in use of generic resources of the country are willing to formalize ABS partnership agreements as commitment demonstration ? Commodity enterprises supported are demonstrative of potential for commercialization

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 3.2.1 *Portfolio blue/green economic opportunities initiatives prepared using local biological resources that have high potential to benefit from ABS arrangements, to guide investment*	(i) Number of business case development studies completed (ii) Number of biological resources identified with potential commodity development (food, medical, cosmetic, other applications)	0 0	1 1	1 2	? Blue/green Business case dossier for commodity development	and replication with options for sustainable financing ? Local partner agencies will dedicate resources to enhance capacity to deliver services associated with the project outputs ? Extreme climatic events should they occur will not be significantly disruptive during course of the project ? Government will commit needed resources for maintenance of the ABS management protocols to maintain continuity ? The COVID-19 pandemic impacts lessen over the course of the project and present no adverse impacts to the project ?
Output 3.2.2 *Chemical screening and testing on Protium attenuatum resin extracts conducted to ascertain the character of active ingredients to support community enterprise development*	(i) Number of chemical screening reports	0	1	1	? Chemical screening reports ? Recommendations Report to support community enterprise development	
Output 3.2.3 *Grant mechanism piloted to support pilot gender-balanced community enterprises that will benefit from ABS arrangements*	(i) Number of small grant packages issued to eligible applicants. (ii) Value (US$) of grants awarded (iii) % grants awarded to female beneficiaries (iv) Number training events to beneficiaries	0 $0 0% 0	2 $50K 50% 2	5 $100K 50% 4	? Business plans presented by applicants ? Grant agreements with applicants ? Grant disbursement records ? Training workshop minutes ? Awardee portfolio performance reviews	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 3.2.4 *Local network of medicinal germplasm banks to curate indigenous genetic resources established for use by communities.*	(i) Number of germplasm banks established (ii) Number of training events to local communities	0 0	2 2	5 5	? Custodian agreements ? Supplies/materials procurements ? Germplasm banks/nurseries ? Training workshop minutes	
Outputs under Component 3 Output 3.1.1 Memorandum of Agreement on technical collaboration between the GOSL and the Kentucky Reptile Zoo or other potential partner and PIC and MAT agreements prepared on collaborative research and capacity building for bio-prospecting and institutional support related to use of venom of the Saint Lucia Viper Output 3.1.2 Updated population assessment of the St Lucia Viper delivered to inform management approaches by the Forestry Department to facilitate sustainable resource use and enhance public safety Output 3.1.3 Exploratory assessment into the Saint Lucia Viper venom and its potential for commercialization Output 3.2.1 Portfolio blue/green economic opportunities initiatives prepared using local biological resources that have high potential to benefit from ABS arrangements, to guide investment Output 3.2.2 Chemical screening and testing on *Protium attenuatum* resin extracts conducted to ascertain the character of active ingredients to support community enterprise development Output 3.2.3 Grant mechanism piloted to support pilot gender-balanced community enterprises that will benefit from ABS arrangements Output 3.2.4 Local network of medicinal germplasm banks to curate indigenous genetic resources established for use by communities.						
Component 4: Enhance Knowledge management on ABS to support decision making, stakeholder engagement and buy-in systems						
Outcome 4.1 Heightened awareness among policy and technical stakeholders, NGOs and the public, on the provisions of the Nagoya Protocol and the associated national institutional and regulatory frameworks	(i) % increase over baseline in the level of awareness among target beneficiaries measured through gender-disaggregated survey	0%	25%	50%	Results from stakeholder survey	? Local partner agencies will dedicate resources to enhance capacity to deliver services associated with the project outputs ? Extreme climatic events should they occur will not be significantly disruptive during course of the project

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 4.1.1 *Communications and outreach strategy prepared on ABS for adoption and integration within work of CNAs and NGOs*	(i) Number of completed ABS communication and outreach strategies (ii) Number of KAP surveys conducted	0 0	1 1	1 2	? Communication / outreach strategy documentation ? KAP survey findings	? Government will commit needed resources for maintenance of the ABS management protocols to maintain continuity ? The COVID-19 pandemic impacts lessen over the course of the project and present no adverse impacts to the project
Output 4.1.2 *Suite of at least 10 knowledge products and public education material developed and distributed to relevant authorities, targeted audiences and the general public*	(i) Number of knowledge and PR product packages developed (ii)	0	3	10	? KM/PR package resources ? Stakeholder survey/feedback ? Website activity / statistics	
Output 4.1.3 *Series of at least 10 knowledge sharing events convened for exchanging lessons learned, information dissemination and networking organized and facilitated for gender-balanced participation among policy and technical support professionals, practitioners and other beneficiaries.*	(i) Number of knowledge sharing events hosted by the project (ii) Number of participants in KM events (50% male, 50% female)	0 0	5 20	10 30	? Media coverage of the events ? Reports on events hosted ? Stakeholder survey/feedback	

Outcomes/outputs	Indicators	Baseline	Mid-term Targets	End of Project Targets	Means of Verification	Assumptions
Output 4.1.4 *Project monitoring and evaluation system operating providing systematic information on progress in meeting project outcome and output targets*	(i) M&E system is established and approved by UNEP	0	1	1	? Project management reports ? M&E records; Half-year progress reports, PIRs ? Mid-term Review and Terminal Evaluation	
Outputs under Component 4 Output 4.1.1 Communications and outreach strategy prepared on ABS for adoption and integration within work of CNAs and NGO?s Output 4.1.2 Suite of at least 10 knowledge products and public education material developed and distributed to relevant authorities, targeted audiences and the general public Output 4.1.3 Series of at least 10 knowledge sharing events convened for exchanging lessons learned, information dissemination and networking organized and facilitated for gender-balanced participation among policy and technical support professionals, practitioners and other beneficiaries. Output 4.1.4 Project monitoring and evaluation system operating providing systematic information on progress in meeting project outcome and output targets						

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

PIF Text	CEO ER Text	Explanation for changes
Project Objective: To enhance the enabling environment to effectively implement the provisions of, and advance accession to the Nagoya Protocol within a harmonized institutional and intersectoral approach, and demonstration of replicable models for equitable access and benefit sharing (ABS)	Project Objective: To enhance the enabling environment to effectively implement the provisions of the Nagoya Protocol with a harmonized institutional and intersectoral approach as well as demonstrate replicable models for equitable and sustainable access and benefit sharing (ABS).	Change reflects the advances made since the PIF stage of the project. Saint Lucia has now acceded to the Nagoya Protocol and thus the project no longer has accession to the Protocol as an objective. The restructure also brings clarity to the focus of the project.

PIF Text	CEO ER Text	Explanation for changes
Table B Component estimated costs **GEF budget:** Component 1: **$217,342** Component 2: **$434,682** Component 3: **$507,130** Component 4: **$289,788** **Co-financing:** Component 1: **$1,000,000** Component 2: **$2,000,000** Component 3: **$2,300,000** Component 4: **$1,150,000** PMC: **$700,000**	**Table B Revised component costs** **GEF budget:** Component 1: **$124,607** Component 2: **$397,577** Component 3: **$458,026** Component 4: **$307,223** **Co-financing:** Component 1: **$970,421** Component 2: **$962,272** Component 3: **$1,421,704** Component 4: **$1,719,565** PMC: **$562,115**	Costs assigned to the GEF budget were re-evaluated in consultation with stakeholders based on scope of work for consulting service engagement and goods procurements, costs for travel, meetings and training. The co-financing budgets were revised based on secured co-financing (see below)

PIF Text	CEO ER Text	Explanation for changes
Table C Indicative Sources of Co-financing Estimated co-financing at PIF: $7,150,000	The overall project co-financing amount adjusted from $7,150,000 to **$5,636,077** Changed co-financing: ? Ministry of Education, Gender, Innovation and Sustainable Development: Revised down to $1,079,040. At PIF was $2,500,000 ? Ministry of Agriculture, Fisheries, Food Security and Rural Development: Revised down to $2,243,345.51. At PIF was $3,000,000 ? Kentucky Reptile Zoo. Revised down to $400,000. At PIF was $500,000 ? Organization of Eastern Caribbean States: Revised up to $222,200. At PIF was $100,000 ? Fauna & Flora International Revised down to $82,000. At PIF was $100,000 Additional co-financing secured during PPG: ? Inter-American Institute for Co-operation on Agriculture - $24,625 ? Caribbean Doctors Association (Martinique) - $106,250	(1) Ministry of Education, Gender, Innovation and Sustainable Development, (2) Ministry of Agriculture, Fisheries, Food Security and Rural Development (3) Kentucky Reptile Zoo (4) Fauna & Flora International have reduced the amount of committed co-financing. (1) Organization of Eastern Caribbean States increased the amount of committed co-financing. Seven (7) additional partners have committed to providing in-kind co-financing for the project since the PIF stage approval. All agencies and the amounts committed have been included in Table C. Based on the updated project costing, the proponents consider the revision downwards in the overall amount levered for co-financing will not adversely impact output achievement and or compromise the expected outcomes.

PIF Text	CEO ER Text	Explanation for changes
	(?100,000; based on currency rate December 2022) ? Saint Lucia National Conservation Fund $10,000 ? Sir Arthur Lewis Community College - $92,593 ($200,000 East Caribbean dollars based on exchange rate) ? Saint Lucia National Trust - $29,630 ($80,000 East Caribbean dollars based on exchange rate) ? Attorney General?s Chambers - $237,699 ? Department of Gender Affairs - $158,694	
Outcome 1.1 indicators ? Revised BCSU Bill endorsed by stakeholders and presented to Cabinet for endorsement ? Cabinet endorsement of accession to the Nagoya Protocol Instrument of Nagoya Protocol accession	**Revised Outcome 1.1 indicators** (i) Number of ABS policy positions adopted by the Government of Saint Lucia (ii) Multi agency committee with responsibility for ABS established and operational	Change made to reflect the status of accession to the NP since the PIF was approved
Output 1.1.1 Dossier for submission to the depository of the CBD Secretariat for Nagoya Protocol Accession prepared.	**Revised Output 1.1.1** Existing policy on ABS finalized and submitted to Cabinet for consideration and adoption	Change made to reflect the status of accession to the NP and to include the priority of implementing the national ABS policy which is critical to the sustainable framework for NP implementation in country.

PIF Text	CEO ER Text	Explanation for changes
Output 1.1.2 Draft Biodiversity Conservation and Sustainable Use Bill Upgraded to include relevant ABS clauses and regulations to facilitate accession to and operationalization of the Nagoya Protocol for consideration by stakeholders and adoption by Cabinet.	**Revised Output 1.1.2** Draft Biodiversity Conservation and Sustainable Use Bill upgraded to include relevant ABS clauses and regulations to facilitate operationalization of the Nagoya Protocol for consideration by stakeholders and adoption by Cabinet	Change made to reflect the update in status of Saint Lucia with accession to the NP and to prioritize focus on the operationalization of the NP through a focused legislative instrument.
Outcome 2.1 Indicator: Institutional capacity of at least 50 staff of CNAs and other government institutions enhanced in applying ABS regulatory protocols	**Revised Outcome 2.1 Indicator:** Institutional capacity of at least **20** staff of CNAs and other government institutions enhanced in applying ABS regulatory protocols.	The PPG consultations revealed that the number of specialists is smaller than originally anticipated
Output 3.1.1: Memorandum of agreement on technical collaboration between the GOSL and Kentucky Reptile Zoo and PIC and MAT agreements prepared on collaborative research and capacity building for bioprospecting and institutional support related to use of venom of the Saint Lucia Viper	**Revised Output 3.1.1:** Memorandum of agreement on technical collaboration between the GOSL and the Kentucky Reptile Zoo or other potential partners and PIC and MAT agreements prepared on collaborative research and capacity building for bioprospecting and institutional support related to potential use of venom of the Saint Lucia Viper	Inclusion of ?other partners? to allow for a wider scope of potential agreements on the use of the Saint Lucia viper and its derivatives; this will capture the anticipated work with the Clodomiro Picado Institute.

PIF Text	CEO ER Text	Explanation for changes
Output 3.1.3 Handling protocols, DNA fingerprinting methodologies and training resources for St Lucia Viper venom extraction and processing developed for use by wildlife management professionals and medical practitioners.	**Revised Output 3.1.3** Exploratory research into the Saint Lucia Viper Venom and its potential for commercialization.	Based on discussions with experts during the PPG it was determined that the overall output should be oriented more toward contributing to needed ?preparatory work? toward determining the commercial viability of the viper venom derivative.
Outcome 4.1: Heightened awareness among policy and technical stakeholders on the provisions of the Nagoya Protocol and the associated national institutional and regulatory frameworks	**Revised Outcome 4.1:** Heightened awareness among policy and technical stakeholders, NGOs and the public, on the provisions of the Nagoya Protocol and the associated national institutional and regulatory frameworks	The NGO community and the public are emphasized in the awareness-raising effort as their inclusion is critical to ensuing change at the policy level.
Output 4.1.1: Communications and outreach strategy prepared on ABS for adoption and integration within work of CNAs	**Revised Output 4.1.1:** Communications and outreach strategy prepared on ABS for adoption and integration within work of CNAs and NGOs	Change made by the Government of Saint Lucia as NGOs play a great role in implementation of environmental policies and laws in country.
Output 4.1.2: Suite of at least 20 knowledge products and public education material developed and distributed to relevant authorities, targeted audiences, and the general public	**Output 4.1.2:** Suite of at least **10** knowledge management products and public education material developed and distributed to relevant authorities, targeted audiences and the general public	Further consideration was given during the PPG consultations on the type/orientation of knowledge products that resulted in determination of the number of types of products.

PIF Text	CEO ER Text	Explanation for changes
Baseline scenario and any associated baseline projects:	This section has been adjusted to include changes that reflect the current status of St Lucia as party to the NP, inclusion of an outline of the GIZ ABS Initiative project and the OECS Biospace initiative. These projects will provide synergies to the proposed ABS project.	The country had not yet ratified the NP and information on these projects was not available at the time to be included in the PIF submission/approval.
Stakeholders: 23 stakeholder groups were identified at PIF stage	47 stakeholder groups were identified during PPG stage	The consultations during the PPG phase allowed for the identification of a wider community of stakeholders and beneficiaries and roles in the project implementation.
Project Risk Assessment	New risk Lack of Investment into commercialization of biodiversity pilots	Risk included to acknowledge the risk associated with the duration of time it may take to fully realize the piloted gender-balanced community enterprises that will be supported by the grant mechanism.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

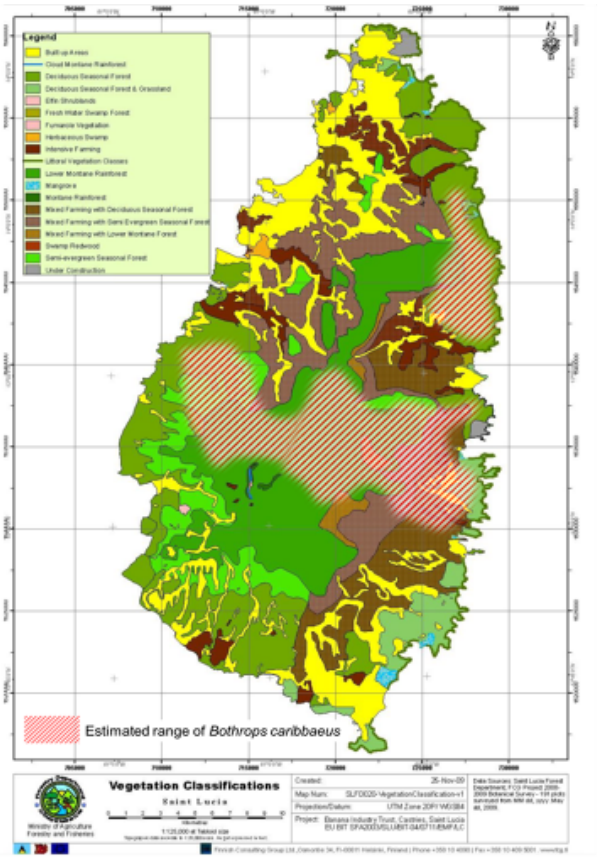
PPG Grant Approved at PIF: **50,000**			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Expert assessment on ABS and communication/KM	43,750	35,417	8,333
Consultation process meetings and travel	2,000	2,000	
Workshops	3,000	3,000	
Communication, dissemination, translation, data, miscellaneous	1,250	1,250	
Total	50,000	41,667	8,333

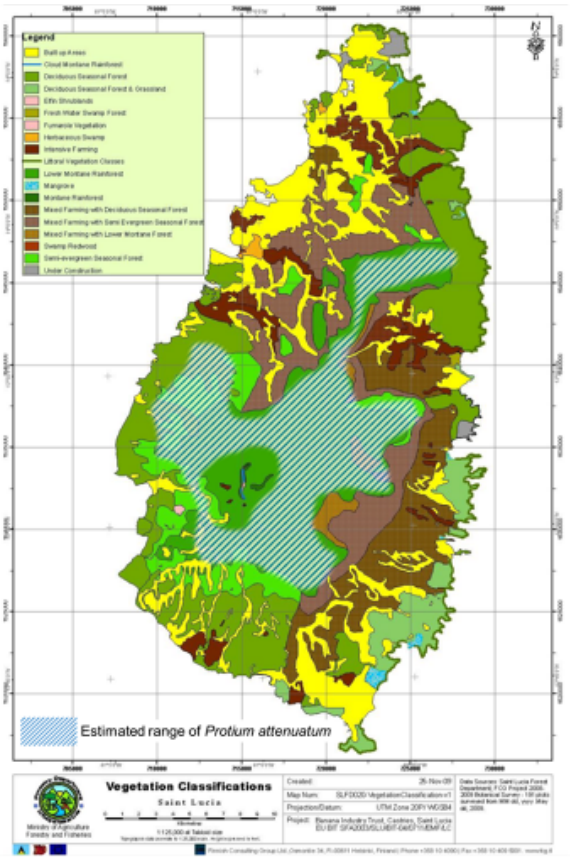
ANNEX D: Project Map(s) and Coordinates

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

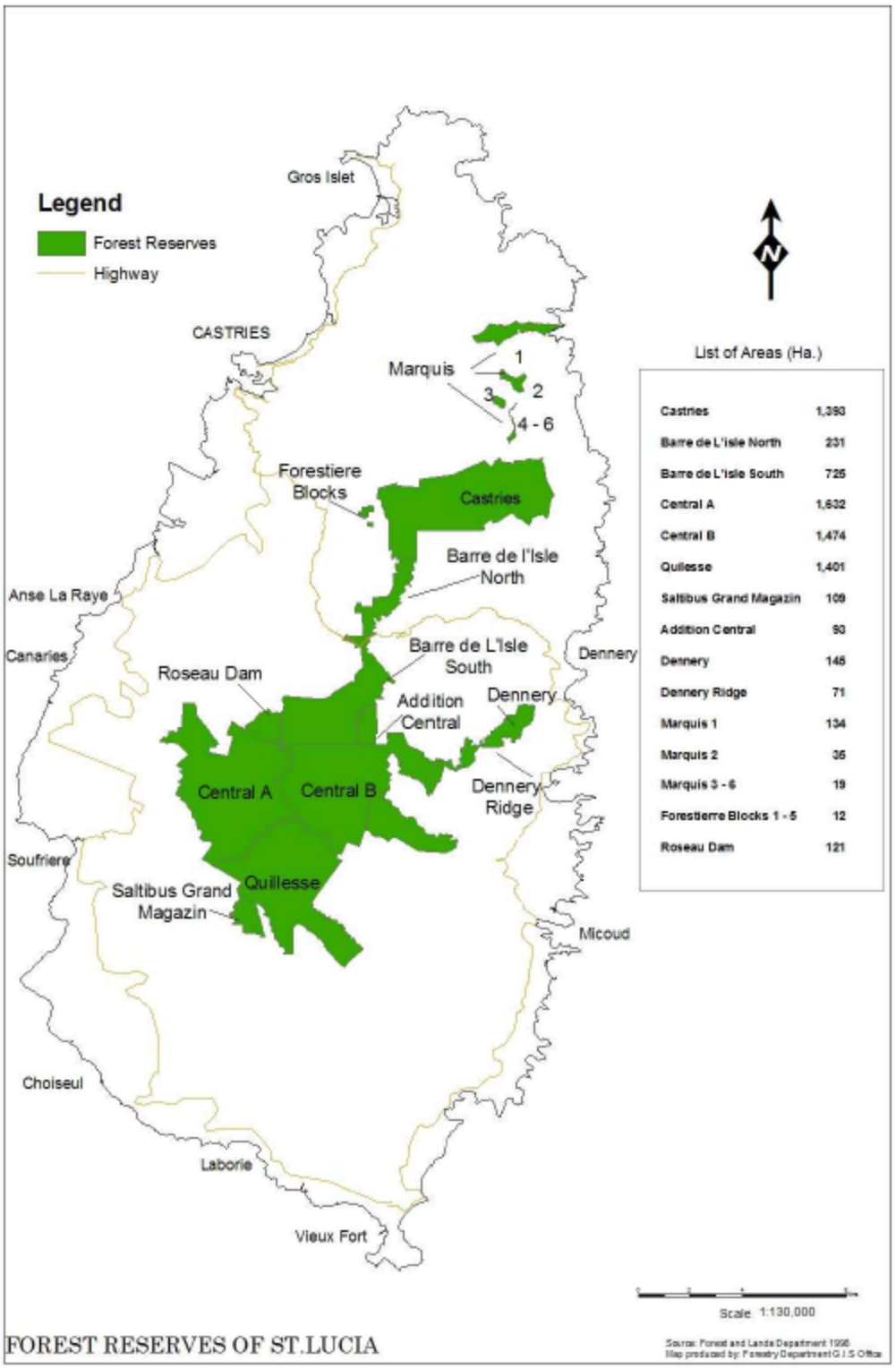
(1) Range of *Bothrops caribbaeus*

(2) Range of *Protium attenuatum*

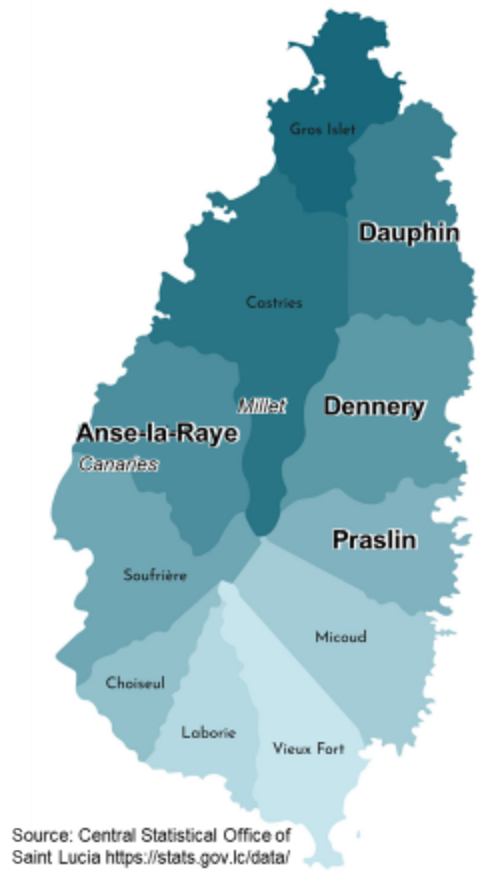




Note: Range maps illustrating distributions of the Saint Lucia Viper and Lansan Tree were approximated based on map sources in: Graveson, R. (2009) ***The Classification of the Vegetation of Saint Lucia.*** Technical Report No. 3 to the National Forest Demarcation and Bio-Physical Resource Inventory Project, FCG International Ltd, Helsinki, Finland. https://7e327755-b8e1-460d-82f3-39dd97b0edd6.filesusr.com/ugd/f95386_6e470da473f843229865d8816411ec66.pdf



(3) Government Forest Reserves (protected areas)



(4) Districts of Saint Lucia

ANNEX E: Project Budget Table

Please attach a project budget table.

GEF ID: 10840 Strengthening access and benefit-sharing (ABS) policies and institutional frameworks through demonstrable models in Saint Lucia

Appendix H -1: Indicative GEF Project Budget

Expenditure Category	Detailed Description	Component (US$eq.)								Sub-Total	M&E	PMC	Total (US$eq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency/IE)
		Component 1		Component 2		Component 3	Component 4							
		Outcome 1.1	Outcome 1.2	Outcome 2.1	Outcome 2.2	Outcome 3.1	Outcome 3.2	Outcome 4.1	Outcome 4.2					
Works	...									-			0	
	...									-			0	
Goods														
	Laptops		3,000.00		3,000.00		4,000.00			10,000.00			10,000.00	
	3.2.4 Establishment of Germplasm Bank Facilities (for example wood, seedlings, pots etc.)						60,000.00			60,000.00			60,000.00	UICN
	2.2.1 Equipment procurement and software installation for electronic permitting system and ABS CHM				50,000.00					50,000.00			50,000.00	UICN
	2.2.1 Computing equipment (including equipment for the SALCC to facilitate the training module certificate program)				30,000.00					30,000.00			30,000.00	UICN
Sub-contract to executing partner/ entity														
	3.2.3 Saint Lucia National Conservation Trust – Establish/demonstrations of ABS investment opportunities with PIC and MAT agreements						110,000.00			110,000.00			110,000.00	Saint Lucia National Conservation Trust
Contractual Services – Company														
	Video production (Media firm) - Develop Education Awareness training materials and short videos			5,500.00						5,500.00			5,500.00	UICN
	Video production (Media firm) -Develop and distribute training video			5,000.00						5,000.00			5,000.00	UICN
	Video production (Media firm) - Develop and implement a series of four (5) high quality short videos documenting ABS and the ABS framework in Saint Lucia.			50,000.00						50,000.00			50,000.00	UICN
	Video production (Media firm) - Produce one (1) video capturing the general information shared at the ten events.			5,000.00						5,000.00			5,000.00	UICN
	Diagnostic Laboratory			25,000.00						25,000.00			25,000.00	UICN
	Publication Media firm -Develop and print fact sheets and pocket guides			15,000.00						15,000.00			15,000.00	UICN
International Consultants														
	Mid-Term Review									-	30,000.00		30,000.00	UICN
	Terminal Evaluation									-	40,000.00		40,000.00	UICN
	Legal, gender and financial oversight			51,265.00	25,632.38	51,265.00	25,632.38	25,632.38		179,427.13			179,427.13	UICN
	M&E specialist	5,763.00		5,763.00		5,763.09		5,763.00		23,052.38			23,052.38	UICN
	ABS Legal/policy Specialist	25,000.00	15,000.00	5,000.00						45,000.00			45,000.00	UICN
	ABS Information Technology Systems Management Specialist				80,000.00					80,000.00			80,000.00	UICN
	Herpetologist /Ecology Assessment Specialist					35,000.00				35,000.00			35,000.00	UICN
	Snake Handling Specialist					15,000.00				15,000.00			15,000.00	UICN
	...									-			-	
Local Consultants														
	Communications and Knowledge Management Specialist							87,000.00		87,000.00			87,000.00	UICN
	Business Development Specialist						55,000.00			55,000.00			55,000.00	UICN
	Silvicultural / Nursery (Germplasm) Management Specialist						30,000.00			30,000.00			30,000.00	UICN
	Audits (1 per year)					-				-		25,000.00	25,000.00	
Salary and benefits / Staff costs														
	Project Co-ordinator	11,664.30			10,136.97		11,365.55	134,000.00		167,149.81	38,871.31	7,771.36	213,792.48	
	Finance and Admin Assistant									-	-	87,500.00	87,500.00	
Training, Workshops, Meetings														
	Inception Workshop									-	15,000.00		15,000.00	UICN
	Monitoring by the Project Steering Committee and advisory technical group of environmental and social risks, and corresponding management plans as relevant.									-	15,000.00		15,000.00	UICN
	Project Closing Workshop									-	15,000.00		15,000.00	UICN
	Activity 1.1.1.2. Conduct national validation workshops on the policy with relevant stakeholders	17,000.00								17,000.00			17,000.00	UICN
	Activity 1.2.1.2 Presentation of report with recommendations inclusive of suggested management and operational framework for CNAs and		3,000.00							3,000.00			3,000.00	UICN
	Activity 1.2.1.3. Implementation of recommendations		5,000.00							5,000.00			5,000.00	UICN
	Activity 2.1.1.3. Conduct stakeholder review meeting/workshop to finalize protocol			5,000.00						5,000.00			5,000.00	UICN
	Activity 2.1.2.5 Complete Certificate Training for stakeholders			10,000.00						10,000.00			10,000.00	UICN
	Activity 2.2.1.5 Conduct training for CNAs and stakeholders on use of the system.				5,000.00					5,000.00			5,000.00	UICN
	Activity 3.1.2.2 Conduct training in population assessment and management of the Saint Lucia Viper					7,000.00				7,000.00			7,000.00	UICN
	Activity 3.1.3.2 Conduct training on milking of snake venom in partnership with the IRE and the Clodomiro Picado Research Institute					7,000.00				7,000.00			7,000.00	UICN
	Activity 3.2.1.3 Conduct consultative dialogues (inclusive of training needs assessment) with industries and practitioner communities to assess/validate potential ABS-related opportunities and capacity needs						5,000.00			5,000.00			5,000.00	UICN
	Activity 3.2.4.6 Host training workshops with custodians						8,000.00			8,000.00			8,000.00	UICN
	Activity 4.1.1.1 Convene stakeholder dialogues to develop a communications and outreach strategy							3,000.00		3,000.00			3,000.00	UICN
	Activity 4.2.2.7 Host at least 3 information sessions with the UWI and other tertiary institutions on ABS processes and research requirements in Saint								9,000.00	9,000.00			9,000.00	UICN
	Activity 4.2.2.8 Host at least 5 general information sessions on ABS for medicinal plant healers, larnsan sappers, practitioners working with genetic resources, and other relevant audiences								15,000.00	15,000.00			15,000.00	UICN
	Activity 4.1.3.2 Host at least 10 knowledge sharing events							18,000.00		18,000.00			18,000.00	UICN
										-			-	
Travel														
	Inception Workshop				4,000.00		3,000.00			7,000.00			7,000.00	UICN
	Activity 1.1.1.2. Conduct national validation workshops on the policy with relevant stakeholders	500.00								500.00			500.00	UICN
	Activity 1.2.1.2 Presentation of report with recommendations inclusive of suggested management and operational framework for CNAs and		500.00							500.00			500.00	UICN
	Activity 1.2.1.3. Implementation of recommendations		1,000.00							1,000.00			1,000.00	UICN
	Activity 2.1.1.3. Conduct stakeholder review meeting/workshop to finalize protocol			500.00						500.00			500.00	UICN
	Activity 2.1.2.5 Complete Certificate Training for stakeholders			1,500.00						1,500.00			1,500.00	UICN
	Activity 2.2.1.5 Conduct training for CNAs and stakeholders on use of the system.				1,000.00					1,000.00			1,000.00	UICN
	Activity 3.1.1.1 Formalized partnership agreement on capacity building, institutional support related to use of the Saint Lucia Viper					3,500.00				3,500.00			3,500.00	UICN
	Activity 3.1.2.2 Conduct training in population assessment and management of the Saint Lucia Viper					4,000.00				4,000.00			4,000.00	UICN
	distribution of the Saint Lucia Viper					1,000.00				1,000.00			1,000.00	UICN
	Activity 3.1.3.2 Conduct training on milking of snake venom in partnership with the IRE and the Clodomiro Picado Research Institute					4,000.00				4,000.00			4,000.00	UICN
	Activity 3.1.3.3 Assess antivenom efficacy through assessment of pure Saint Lucia Viper Venom					1,000.00				1,000.00			1,000.00	UICN
	Activity 3.2.1.5 Monitor projects during implementation and issue periodic portfolio performance reports, support to government meetings to promote project s agenda						500.00			500.00			500.00	UICN
	Activity 3.2.3.5 Monitor projects during implementation and issue periodic portfolio performance reports						6,000.00			6,000.00			6,000.00	UICN
	Activity 3.2.4.5 Install/upgrade 5 germplasm bank facilities and source/stock planting material						1,000.00			1,000.00			1,000.00	UICN
	Activity 3.2.4.6 Host training workshops with custodians						2,000.00			2,000.00			2,000.00	UICN
	Activity 4.1.1.1 Convene stakeholder dialogues to develop a communications and outreach strategy							500.00		500.00			500.00	UICN
	Activity 4.2.2.7 Host at least 3 information sessions with the UWI and other tertiary institutions on ABS processes and research requirements in Saint								1,500.00	1,500.00			1,500.00	UICN
	Activity 4.2.2.8 Host at least 5 general information sessions on ABS for medicinal plant healers, larnsan sappers, practitioners working with genetic resources, and other relevant audiences								3,500.00	3,500.00			3,500.00	UICN
	Activity 4.1.3.2 Host at least 10 knowledge sharing events							3,500.00		3,500.00			3,500.00	UICN
	General operating trips for the project.									-	7,627.27	17,000.00	24,627.27	UICN
										-			-	
Office Supplies	...									-			-	
	Office Supplies		2,000.00		2,200.00				824.16	5,124.16		4,622.64	9,746.80	UICN
Other Operating	...									-			-	
	Office Rent		33,179.94							33,179.94			33,179.94	UICN
	Communications (telephone - Internet)		2,000.00		2,000.00		2,000.00		2,000.00	8,000.00		3,000.00	11,000.00	
Grand Total		$ 59,927.30	$ 64,679.94	$ 184,528.09	$ 213,069.34	$ 234,528.09	$ 323,497.92	$ 277,398.47	$ 29,824.16	1,287,433.42	$ 182,501.58	$ 144,894.00	$ 1,593,829.00	

ANNEX F: (For NGI only) Termsheet

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

ANNEX G: (For NGI only) Reflows

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

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

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