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Annotated Project Document template for nationally implemented projects financed by the GEF/LDCF/SCCF Trust Funds

Project title: Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach		
Country: St Vincent and the Grenadines	**Implementing Partner:** Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour	**Management Arrangements:** Support to National Implementation Modality (NIM)
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document (United Nations Multi-Country Sustainable Development Framework in the Caribbean): Inclusive and sustainable solutions adopted for the conservation, restoration, and use of ecosystems and natural resources.		
UNDP Strategic Plan Output: 2.4.1 Gender responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources, in line with international conventions and national legislation		
UNDP Social and Environmental Screening Category: Moderate	**UNDP Gender Marker:** 2	
Atlas Project ID (formerly Award ID): 00097455	**Atlas Output ID (formerly Project ID):** 00101171	
UNDP-GEF PIMS ID number: 5862	**GEF ID number:** 9580	
Planned start date: Jan 1, 2019 (indicative)	**Planned end date:** June 30, 2023 (indicative)	
PAC meeting date: September 14, 2018		
Brief project description: The main objective of the project Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach with financing from the Global Environment Facility with support from UNDP is to enhance biodiversity conservation and ecosystem services conservation through an expanded and strengthened PA system and with SLM measures integrated in a ridge to reef approach. The Project objective will be achieved by using a multi-focal strategy that includes the development of a national enabling environment (i.e. policy/legal framework, availability and access to information, capacities, technologies, and finance mechanisms) for delivering multiple global environmental benefits in four interrelated outcomes: 1) Strengthened institutional framework for protected areas, biodiversity conservation and SLM/CSA; 2) Effective management of new and existing Pas; 3) Integrated watershed management measures in R2R setting incorporating sustainable livelihood opportunities and; 4) Knowledge management for SLM, CSA and biodiversity conservation. The GEF investment will address the drivers of biodiversity loss (habitat loss, fragmentation and degradation due primarily to unsustainable land use practices and human encroachment, threats that are further compounded by the impacts of climate change and IAS) that will reduce biodiversity loss and land degradation both within PAs and within the mixed-use landscape. The project will deliver global		

The project will deliver global environmental benefits using a participatory approach and ensuring the equal distribution of benefits among men and women, with 346 benefiting from the Project, and resulting in the consolidation and strengthened protection of a 13,214 ha terrestrial PA covering the entire upper watersheds of St Vincent and 7 KBAs, providing landscape connectivity to a 2183 ha marine park through a ridge to reef approach and improving protection of at minimum 63 ha of the sole remaining habitat of a critically endangered (CR) single island endemic.

FINANCING PLAN *(only cash transferred to UNDP bank account and budgeted under the same GEF project should be included under this section (1), all others should be included under section (2).*	
GEF Trust Fund	USD 3,757,102
(1) Total Budget administered by UNDP	**USD 3,757,102**
PARALLEL CO-FINANCING *(all other co-financing that is not cash co-financing administered by UNDP)*	
Ministry of Finance, Economic Planning, Sustainable Development and Information Technology	USD 7,800,000
Ministry of Agriculture, Foresty, Fisheries, Rural Transformation, Industry and Labour	USD 4,047,860
Basic Needs Trust Fund Programme	USD 225,478
SVG Preservation Fund	USD 65,037
(2) Total co-financing	**USD 12,138,375**
(3) Grand-Total Project Financing (1)+(2)	**USD 15,895,477**

SIGNATURES		
Signature: print name below RECARDO FREDERICK	**Agreed by Government**	**Date/Month/Year:** 15/08/2019
Signature: print name below RAYMOND RYAN	**Agreed by Implementing Partner**	**Date/Month/Year:** 15/08/19
Signature: print name below MAGDY MARTINEZ SOLIMAN	**Agreed by UNDP**	**Date/Month/Year:** 30/09/19

I. TABLE OF CONTENTS

List of acronyms

°C	Degrees Celsius
ACP	African, Caribbean, and Pacific Group of States
ART	Agency for Rural Transformation
AZE	Alliance for Zero Extinction
BMZ	German Federal Ministry of Economic Cooperation and Development
CARDI	Caribbean Agricultural Research and Development Institute
CARICOM	Caribbean Community
CATS	Caribbean Aqua-Terrestrial Solution
CBD	Convention on Biological Diversity
CBF	Caribbean Biodiversity Fund
CCI	Caribbean Challenge Initiative
CEPF	Critical Ecosystem Partnership Fund
CMFR	Central Mountain Forest Reserve
CR	IUCN classification: critically endangered
CSA	Climate smart agriculture
CSO	Civil Society Organization
FAO	Food and Agriculture Organization of the United Nations
FSP	Full Sized Project
GCCA	Global Climate Change Alliance
GDP	Gross domestic product
GEF	Global Environment Facility
GEFSEC	Global Environment Facility Secretariat
GIS	Geographic information system
GIZ	Gesellschaft für Internationale Zusammenarbeit
GPS	Global positioning system
ha	Hectares
IAS	Invasive alien species
ICCAS	Integrated Climate Change Adaptation Strategies project
IFAD	International Fund for Agricultural Development
INRM	Integrated natural resource management
IWRM	Integrated water resource management
JCCCP	Japan-Caribbean Climate Change Partnership
KBA	Key Biodiversity Area
km	Kilometre
km^2	Square kilometres
LADA	Land Degradation Assessment
LCMP	Leeward Coast Marine Park
LD	Land Degradation
LD-TSP	Land Degradation Target Setting Protocol
M&E	Monitoring and evaluation
METT	Management Effectiveness Tracking Tool
mm	Millimeters
MMA	Marine Management Area
MPA	Marine Protected Area
MSP	Medium Sized Project
MTR	Mid-term Review
NAP	National Adaptation Plan
NBSAP	National Biodiversity Strategy and Action Plan
NEAB	National Environmental Advisory Board
NGO	Non-Governmental Organization
NIM	National Implementation Modality

NISP	National Implementation Support Programme
NPD	National Project Director
NPPASP	National Parks and Protected Area System Plan
OECS	Organization of Eastern Caribbean States
PA	Protected Area
PASP	Protected Area System Plan
PIF	Project Identification Form
PIR	Project Implementation Report
PMU	Project Management Unit
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
R2R	Ridge to Reef
SDGs	Sustainable Development Goals
SESP	Social and Environmental and Social Screening
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SOP	Standard Operating Procedures
SSTrC	South-South and Triangular Cooperation
STAP	GEF Scientific Technical Advisory Panel
SVG	St Vincent and the Grenadines
SVGPF	Saint Vincent and the Grenadines Preservation Fund
TE	Terminal Evaluation
TNC	The Nature Conservancy
UN MSDF	United Nations Multi-Country Sustainable Development Framework in the Caribbean
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNDP-GEF	UNDP Global Environmental Finance Unit
UNFCCC	United Nations Framework Convention on Climate Change

II. DEVELOPMENT CHALLENGE

1. St. Vincent and the Grenadines is a multiple island nation consisting of 32 Islands and Cays and a population of over 109,118, approx. 92.5% of which live on mainland St. Vincent. The islands are bordered by the Caribbean Sea to the west and the Atlantic to the east. The mainland, the largest island at 34,462 ha and 105 km of coastline, is volcanic with rugged mountainous topography and short transitions areas between terrestrial and marine ecosystems. Within only approx. 6 km, this SIDS extends in elevation from sea level to the highest point of 1234 m (La Soufriere, an active volcano) in the north and 932 m (Mt. Brisbane) in the south, with a variety of habitats from cloud forests to coral reefs which all contribute to the island's diversity and endemism of flora and fauna. The other islands (collectively called the Grenadines) have a total land area is approx. 389 km^2 that extends over 72 km to the southwest of St. Vincent and are low-lying with protected white sand beaches, the highest points 305 m (Union Island) and includes 8 inhabited islands.

2. *Biodiversity Significance.* St Vincent's approximate 12,000 ha of natural forest, concentrated in the central mountain range (proposed Central Mountain Forest Reserve), includes elfin woodland, montane forest, palm brake and seasonal evergreen forest (rainforest) that descend to lowland tropical dry forests (regionally threatened) and mangrove. Of the total forested area of St Vincent, approx. 70% is natural forest, 25% planted forest and 5% agroforestry. These forests also support much of St Vincent's diverse terrestrial biodiversity of multiple endemics and species of global significance. SVG has a diverse natural capital of both terrestrial and marine species, with multiple endemics and species of global significance. A young island of volcanic origin, volcanic sediments prevented the development of extensive coral reefs and only a narrow shelf exists, with good coral growth on the west coast, but few reefs exist on the north and east coasts[1]. Unlike the mainland, the islands of the Grenadines each have fringing reeds with heavy coral abundance.

3. SVG's known species of global significance include numerous IUCN listed species, most notably the Vulnerable endemic St. Vincent Parrot (*Amazona guildingii*)[2][3], also SVG's national bird, the critically endangered (CR) St Vincent Black Snake *Chironius vincenti*, Endangered endemic Tree Frog *Pristimantis shrevei (or synonymously Eleutherodactylus shrevei*) and Whistling warbler *Catharopeza bishopi*[4]. There are two (2) endemic lizards (*Anolis griseus* and *A. vincentianai)* on St Vincent, the other 2 endemic lizards are found in the Grenadines, including the critically endangered Grenadines Clawed Gecko *Gonatodes daudini* (a single island endemic known to only c. 100 ha on Union Island) and the Vulnerable Bequia Dwarf Gecko *Sphaerodactylus kirbyi*[5] (endemic to Bequia and Mustique). Four (4) globally threated species of sea turtle are found in SVG. There are numerous Grenada Bank (Grenada, Grenadine Islands and St Vincent) endemics. A new native species of big-eared bat (genus: Micronycteris) was recently described (2010) on St Vincent. SVG also harbors several species that are endemic to the Grenada Bank (Grenada to the Grenadine Islands to St Vincent): Grenada Tree boa (*Corallus grenadensis),* Grenada Tree Anole (*Anolis richardii*), Grenada Bush Anole (*Anolis aeneus*), Burrowing snake (*Typhlopsta symicris*), and Windward Clelia "Cribo" (*Clelia Clelia*), possibly extinct[6]. SVG has a number of IUCN list species of coral, including 2 CR (Staghorn Coral *Acropora cervicornis*, Elkhorn Coral *Acropora palmata*), 2 Endangered (Boulder Star Coral *Montastraea annularis, Montastraea faveolata*), 6 VU species and 1 NT[7]. Over 150 species of bird have been recorded from SVG, 95 of which breed on the islands as well as twelve (12) restricted range bird species[8]. St Vincent and the Grenadines also supports populations of 76 species of waterbirds (including seabirds) of which 3 seabird species breed on St Vincent (*Phaethon lepturus, Sterna dougallii* and *Anous stolidus*), and an additional nine species nest on uninhabited or undisturbed islets in the Grenadines (*Phaethon aethereus, Fregata magnificens, Sula dactylatra, S. sula, S. leucogaster, Larus atricilla, Sterna maxima, S. anaethetus and S. fuscata*). There are approximately 37 ha of mangroves (2005 estimate) in SVG, comprising of Buttonwood,

[1] Bouchon, C., Miller, A., Bouchon-Navaro, Y., Portillo, P. and Louis, M. (2004) Status of Corals Reefs in the French Caribbean Islands and Other Islands of the Eastern Antilles. In: In: Wilkinson, C. (ed.). *Status of Coral Reefs of the World: 2004*. Global Coral Reef Monitoring Network and Reef and Rainforest Research Centre, Townsville, Australia. pp 493-507.

[2] Culzac-Wilson, L. 2005. *Species conservation plan for the St Vincent Parrot* Amazona guildingii. Puerto de la Cruz, Tenerife: Loro Parque Fundación.

[3] Forestry Department 2004. St Vincent Parrot census. Kingstown, St Vincent and the Grenadines: Forestry Department, Ministry of Agriculture, Forestry and Fisheries. (Unpublished report).

[4] The IUCN Red List of Threatened Species. Version 2017-3. <www.iucnredlist.org>. Downloaded on 08 June 2018.

[5] Ibid

[6] Government of St Vincent and the Grenadines. 5TH National Report to the CBD. 2015.

[7] IUCN 2018

[8] Culzac-Wilson, L. 2005. St Vincent Pp *in* C. Devenish, D. F. Díaz Fernández, R. P. Clay, I. Davidson & I. Yépez Zabala Eds. *Important Bird Areas Americas - Priority sites for biodiversity conservation.* Quito, Ecuador: BirdLife International (BirdLife Conservation Series No. 16).

Red, White and Black mangroves species concentrated mainly in the Grenadines, with only 4 identified stands of mangrove remaining in St Vincent.

4. *Socio-economic Context*. Of the total estimated SVG population of 109,118, approx. 92.5% live on mainland St. Vincent. With its mountainous terrain, most of the population is concentrated within approx. 1 km of the coastline, 46% in and around Kingstown. In 2017 the Gross National Income of SVG showed a slight increase from US$6, 670 in 2016[9] to US$ 6, 990.0 (2016[10]), at a growth rate of 1.6%. Both mainstays of SVG's economy rest on environmental services, with economic diversification (SVG policy) showing a shift from one heavily reliant on trade in goods (primarily agriculture) to one based on services (tourism). The agricultural contribution to GDP steadily declined with this diversification, from 21.2% in 1990 to 6.17% in 2012. An increased livelihood reliance on fisheries led the sector's contribution to GDP to increase steadily, rising from US$2,548,139 (2003) to US$3,765,059.57 (2007), a resource vulnerable to coastal degradation led by unsustainable upland agriculture and development practices. SVG has an open economy that is now mainly driven by the service sector, with a 1.64% growth from 2012 to 2013, and total Gross Domestic Product (GDP) amounting to US$620,740,120[11]. Recent natural disasters have resulted in huge economic costs and shift from investment activities to recovery, including: 2010 Hurricane Tomas (US$55.56 million); 2011 floods (US$37.07 million); 2013 floods (US$122.22 million). These natural disasters caused significant loss of lives, infrastructure, livestock and agricultural commodities.

5. Both mainstays of SVG's open economy rest on environmental services, with economic diversification (SVG policy) showing a shift from one heavily reliant on trade in goods (primarily agriculture) to one based on services (tourism). Currently, only approx. 7,200 ha of land is used for agriculture production, representing 20.9 % of the total land area of St. Vincent and the Grenadines. With the loss of the Banana market, production shifted to "other crops" (root crops, vegetables, fruit trees) that accounted for 61.3% of the total 2010 agricultural contribution to GDP. These "other crops" are farmed predominantly on small farms of < 1 ha[12] with unsustainable agricultural practices taking place on steep slopes, subject to the impacts of climatic events and heavy rainfall without adequate climate resilient practices. Production of "other crops" is supported by SVG's soils, drying conditions and production knowledge. Although land under agricultural production decreased, significant unsustainable agricultural practices are taking place on steep slopes, land use on agricultural lands is shifting to housing, and development, and IAS/disease is destroying crops, all of which contribute to continued land degradation and fragmentation, further compounded by the effects of changing climatic condition. Unsustainable land management within the upper watersheds in SVG is of particular significance where over 50% of the slopes are 30°or more and only 20% less than 20°[13].

6. A 2007/2008 poverty assessment[14] defines 42% of the population falling below the poverty line with a high dependence on environmental services provided by the island's natural resources. Female-headed, single parent households constitute a significant percentage of these poorer households (53%), and female participation in all sectors of the economy is less than men with higher numbers of females in the lowest income segment indicting a gender segmentation in economic participation. Female unemployment is also high (30%)[15] in the rural and agricultural areas (where poverty is higher than in urban areas), where their involvement in the agricultural chain is mainly limited to assisting male partners and in the under-developed agro-processing segment. Women traditionally make up a significant portion of the local agricultural sector including post production activities, however, there are constraints to their levels of involvement, and access to support is traditionally more available to men, such as extension services and finances. Furthermore, High unemployment among young males is visibly associated with illegal informal economy (i.e. marijuana cultivation), negatively impacting the watershed and ecosystems by the deforestation of highlands for its cultivation. Illegal marijuana cultivation is a key driver of deforestation in mainland St Vincent. Youth female unemployment is higher than the overall 25 percent youth unemployment overall. With a national literacy rate of 96%, the population has the literacy necessary for involvement and participation in conservation and natural resources management including sustainable livelihood options.

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[9] The World Bank Group:http://databank.worldbank.org/data/reports.aspx?source=2&country=VCT

[10] Ibid

[11] SVG Statistical Office - Central Planning Division.

[12] Min. of Agriculture, Planning and Statistics. 2018 *Confirm Dept name*

[13] Barker (1981) in Caribbean Conservation Association (1991).

[14] Kairi Consultants 2008. St Vincent and the Grenadines Country Poverty Assessment 2007/2008: Living Conditions in a Caribbean Small Island Developing State. Kingstown: Ministry of Finance and Planning Administrative Centre.. 162 pp. http://www.stats.gov.vc/LinkClick.aspx?fileticket=gxP733Q3EZk%3D

[15] International Monetary Fund (2017), St. Vincent and the Grenadines, Staff Report for 2017 Article IV Consultation.

7. Agriculture, particularly for bananas, was one of the main employers in St. Vincent and the Grenadines, the 2000 Agriculture census showed that this industry employed over 40% of the workforce. Rural communities suffered particularly with the decline of this industry, primarily with loss of employment and an increase in the incidence of poverty. With the restructuring of the Windward Island Banana Development Corporation, it was estimated that the number of active banana growers is to have declined by over 50%, from approximately 8000 in 1992 to 3,800 in 2001, with 1,300 farmers and 1,950 farm workers displaced, the majority of which were female[16]. This contraction of the agricultural sector due to the decline of the banana industry led to loss of employment and reduced education, negatively impacting household incomes. This forced family members to seek alternative sources of livelihoods which led to natural resource intensive activities such as hunting and the clearing of forests in the highlands for illegal crops cultivation. These new livelihood activities, particularly forest clearing, resulted in increased land degradation and pollution particularly in SVG's watersheds.

8. Much of SVGs forest loss (estimated at 3-5% annually[17]) took place prior to 2007, when SVG's economic growth was mostly dependent upon agriculture, with the main export crop (bananas) exported to the EU under its preferential arrangements. The 2000 Agriculture census showed that this industry employed over 40% of the workforce. These preferential arrangements ended in 2007, and agriculture declined significantly over the last decade with restrictive trade regimes, increasing competition from other agriculture producers, and pest infestations (e.g. pink mealy bug). Many farmers were forced out of agriculture resulting in threats to food security, livelihoods and the national economy. The main cause of poverty in 2001 was identified as the decline in the competitiveness of the Banana Industry[18]. The increase in poverty threats to livelihood, and economic hardships on some segments of the population impacted negatively on the use of land and other natural resources resulting in some unsustainable practices. Unemployment led to forest clearing, slash and burn agriculture, small agricultural plots and illegal cultivations on steep forest slopes and in watersheds. Banana farms were subdivided and converted to housing and infrastructure, often on steep unsuitable slopes with impermeable surfaces that have led to downstream flooding and coastal degradation, degradation exacerbated by the impacts of extreme climatic events. Reforestation efforts by Government focused on key upper watershed areas above the 1000 ft contour, and while efforts supported soil conservation and land stability, non-native species were used[19]. With the decline in agriculture, there was an increased livelihood reliance on fisheries which led this sector's contribution to GDP to increase steadily, rising from US$2,545,737 (2003) to US$3761510 (2007), a resource also vulnerable to coastal degradation led by unsustainable upland agriculture and development practices.

9. _Water_. St. Vincent's mountainous terrain, natural vegetation and climate provide essential ecosystem services, supporting its perennial and ephemeral streams in 16 large watersheds. Surface water is the major source of portable water, irrigation and industrial supplies, with annual average rainfall sufficient to meet local requirements. Natural springs also indicate the presence of ground water, although the size of this water source is not well known (a spring in Congo Valley provides adequate water supply for the water bottling plant). Although there have been occasional periods of moderate water shortage during the dry season, the country does not usually experience severe supply constraints, though decreased stream flow is noted with implications for future water supply. The Central Water and Sewerage Authority (CWSA) operates 12 gravity-fed water supply systems to deliver potable water from the rivers to domestic, industrial and business consumers (six non-operational since their destruction by Hurricane Tomas). However, severe climatic events are increasingly impacting this essential ecosystem services and, coupled with unsustainable agricultural practices and habitat fragmentation, are resulting in severe land degradation. As a result of Hurricane Tomas in 2010, the volume of water extracted annually from the Perseverance River had declined from 130,038 to 83,918 million gallons between 2009 and 2012[20]. The floods of April 2011 resulted in further disruption of ecosystem services and damaged irrigation supplies from the National Irrigation Authority, many of which have not been restored. These floods also caused severe damage in large watersheds, such as Perseverance, which has a minimum capacity of 856,000 gallons of water per day, providing 5% of national demands. On the north-eastern side of the country, five irrigation schemes were commissioned to supply water to approximately 567 ha with irrigation water, but poor land use practices continue to affect the quality of water. During the rainy season, particulate matter and sediments enter the water due to lack of equipment for coagulation, sedimentation and filtration,

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[16] Ibid

[17] Ministry of Health and Environmental (2010).

[18] Kairi Consultants Ltd. 2009. St. Vincent and the Grenadines Country Poverty Assessment 2007/08: Living Condition in a Caribbean SID, Central Planning Division 80.

[19] Forestry Department, Pers. Comm. Reforestation efforts part of 1980s CIDA funded that included replanting of Blue Mahoe *Talipariti elatum* (80 ha) in the Montreal Watershed above the 1000 ft contour. Current Forestry Department intentions is to manage / thin the plantation and initiate restoration with native species seedlings (see Project Output 3.2).

[20] Government of St Vincent and the Grenadines. 5TH National Report to the CBD. 2015.

with contamination by agricultural chemicals unknown. Three large rivers supply hydroelectricity harnessed by St. Vincent Electricity Services (VINLEC), meeting approximately 20% of the national electricity demand. The water supply situation is significantly different in the Grenadines, where there are no rivers. Residents have relied on rainwater as their main source of drinking water, in spite of low rainfall during the dry season and droughts, with regular water stress experienced. Groundwater is also taken from wells and ponds fed by rainwater, used for construction and livestock. Now, communal rainwater catchment systems and desalination plants provide a continuous year-round supply of fresh water (on Bequia, the plant can produce between 16,000 and 32,000 GPD)[21].

10. *Protected Area*. Protected Areas in SVG, have the goals to safeguard the islands natural capital, ecosystem services and meet the countries' commitment to the Caribbean Challenge Initiative (CCI) which is to effectively conserve and manage at least 20 percent of the marine and coastal environment by 2020. According to the National Park and Protected Area System Plan (NPPA System Plan, 2009-2014)[22], there are no National Parks, 3 Forest Reserves, 24 Wildlife Reserves, 1 Marine Park, 1 marine Reserve, and 6 Marine Conservation Areas protected under SVG law. Included in the additional 75 proposed sites are 7 KBAs (and proposed Forest Reserves) that will be consolidated into one Central Mountain Forest Reserve (13,214ha) under this Project. Although all lands above the 1,000 ft (305m) contour in SVG are Crown lands (the above-mentioned KBAs), only the Cumberland Forest Reserve (1,020 ha) and the Parrot Wildlife Reserve (3,075 ha) are legally gazetted. The system plan contains conflicting multiple designations (i.e. Parrot Reserve overlaps geographically with 3 proposed Forest Reserves).

11. *Project's Area of Influence*. The project's area of influence covers 22,578 ha land area and 2,183 ha marine area and extends from the upper most areas in the central mountain range of the island's interior above the 305 m contour (Crown land since 1912), the proposed Central Mountain Forest Reserve (CMFR, 13,214 ha) into 3 watersheds (Yambou, Kingstown, and Buccament) of which the latter extends into the proposed Leeward Coast Marine Park (LCMP). Most of these upper watershed elevations are inaccessible due to steep slopes and contain the island's remaining large tracts of forest ecosystems that supply all of the island's potable water. There are few small private landholdings above this contour, only limited deforestation takes place except for illegal cultivation mostly in the island's northern slopes of La Soufriere. In contrast, extensive conversion of forests below this contour with unsustainable land use practices (housing, agriculture, infrastructure) have resulted in continued forest loss, fragmentation and degradation, making the country increasingly vulnerable to the impacts of extreme weather events and natural disasters, including landslides, soil erosion and poor drainage of basins. These impacts have had significant adverse effects on biodiversity and populations in the areas, including environmental disasters that had both environment and social-economic impacts. Furthermore, without a legally declared and demarcated Central Mountain Forest Reserve boundary, the proposed CMFR is vulnerable to impacts of unsustainable uses adjacent to its boundaries.

[21] National Report: St Vincent and the Grenadines. Rio +20. Third International Conference on Small Island Developing States. Ministry of Health Wellness and the Environment. July 2013

[22] SVG National Parks and Protected Areas System Plan 2010-2014. National Parks, Rivers and Beaches Authority.

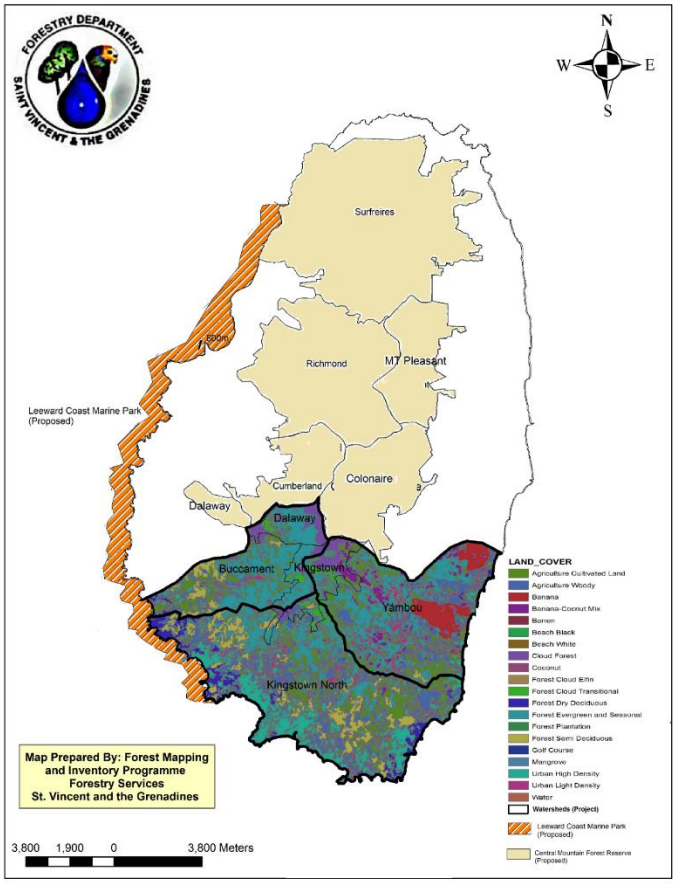


Figure 1. Map of all Project intervention sites

12. The project's pilot R2R intervention site in the Buccament Watershed (2026 ha, the Project's pilot R2R site) extends down from these interior mountains of the proposed Central Mountain Forest Reserve (CMFR, 13,214 ha) into the proposed Leeward Coast MMA (2183 ha) and is characterized by steep, almost vertical ridges and deep narrow valleys that extend down to the sheltered coast, and which is frequently subjected to extreme flooding and coastal and marine degradation as a result of this topography, the upland unsustainable land uses practices and natural disasters. These natural disasters caused significant loss of lives, infrastructure, livestock and agricultural commodities. Project intervention sites in the upper watershed areas of the Yambou (3336 ha) and Kingstown Watersheds (5225 ha) are crucial given the significant infrastructure and urban development lining the downstream coastal areas. With the island's mountainous terrain, most of the nation's population is concentrated within approx.1 km of the coastline, 46% in and around Kingstown.

13. The long-term solution proposed in this project is to address the drivers of BD loss (climate change, habitat loss/fragmentation/degradation, IAS) and LD (forest loss/deforestation, unsustainable agricultural practices, climate change,) and the threats to biodiversity and ecosystem services by having in place sustainable land use and biodiversity conservation that is incorporated into a strengthened institutional framework for protected areas, ecosystem conservation and INRM, with long term sustainability of agricultural production at the community and producer level that addresses gender segmentation, supported through field-based demonstration learning and information exchange. This long-term solution will entail strengthened institution capacity for SLM, CSA and biodiversity conservation, supported by knowledge management, to ensure that structures supported by this project are underpinned by institutions and practioners that have information and capacities to take guided decision and implement appropriate land use decisions.

14. Nevertheless, currently there are three barriers that prevent this solution to be implemented.

Barrier	Description
Lack of sufficient legal/regulatory framework, capacity, coordination financing and access to information for effective PA management and landscape level planning (INRM).	There is insufficient comprehensive gender responsive policy, legal and regulatory mechanisms to ensure effective management of SVG's biodiversity, protected areas or integrated landscape level planning, compounded by overlapping responsibilities, overlapping PA site designations and lack of institutional inter-sectoral integrated coordinating mechanisms for biodiversity, ecosystem and integrated natural resource management activities. Furthermore, lack of an accessible, harmonized and coherent information management systems to house baseline data and monitoring systems, including sex disaggregated socio-economic data, limits informed national decision-making, as does insufficient institutional capacity to implement essential activities for biodiversity conservation, integrated natural resource management, as well as activities such as public education, enforcement and monitoring. Key policy is lacking (Forest Policy), gaps and overlaps are extensive in the various legislations for management of natural resources, biodiversity and watersheds, and regulations do not exist for key legislative such as the Forest Resource Conservation, National Parks, and Wildlife Acts. Regulations that do exist are not being enforced. Lack of PA system and site sustainable financial planning, institutional capacity to develop and implement sustainable financing mechanisms, and limited funds raised locally that contribute to financing PA operational costs and that addresses benefits to both men and women continues to add to inadequate PA management, PA estate expansion, biodiversity conservation and landscape level planning.
Insufficient resources, biodiversity / ecosystem information for effective expansion of the PA estate, species management and conservation of its biodiversity.	Lack of site specific data and information hinders implementation of conservation activities and effective management of an expanded PA estate. Existing biodiversity data is incomplete and outdated (1940s for CMFR), with no current inventories for project intervention sites, of particular significance for the CMFR that is known to harbor significant endemic and species of global significance and Chatham Bay with a CR single island endemic. This lack of information prevents resource managers and other planners from determining whether species are healthy, vulnerable, or extinct. Insufficient personnel (Chatham Bay), and resources (equipment, technology) limits monitoring (forest reserve boundaries) and management (i.e. replanting deforested areas, protection of endangered species' habitat) and expansion of the PA estate (terrestrial and marine). Lack of species recovery and conservation plans as well as monitoring programmes limits species managers and scientist from determining the status, trends for target species. Lack of active monitoring (i.e. St Vincent Parrot *Amazona guildingii*) and inadequate on-site enforcement and management (i.e. critically Endangered *Gonatodes daudini)* is leading to regular export and likely drastic species decline, as well as limiting effective management and protection of PA sites and habitat of other species of global significance. Lack of adequate ecosystem and species research limits identification of threats, including the impacts of IAS on native biodiversity, and along with insufficient resource has resulted in no IAS control measure in place. Lack of successful site / landscape level inter-sectoral management hinders development, implementation and adoption of community participatory management plans and revenue generation sustainable financing initiatives formalized though co-management arrangements that addresses needs of women and ensures benefits to both men and women.
Insufficient awareness, planning and technical capacities at the	There is limited technical knowledge of the importance for CSA and SLM, understanding of implementation techniques, and their role in the integrated landscape to reduce land degradation. Implementation of local technical knowledge for SLM/CSA, new lost-cost technologies and practices suitable for women and men, and post-production micro-enterprise development is limited by available equipment, business development

community / producer level for landscape level sustainable land management, including climate smart agricultural practices	support, capacity, and incentive/demonstration of successful sustainable livelihoods. In addition, the operational technical capacity to plan and incorporate SLM and climate resilient agriculture techniques into land use practice is insufficient at the national, sub-national and local levels, with expansion to producers limited by technological (low-cost) support and integration into an expanded extension outreach programme. Discrete SLM and CSA measures do not link systematically with interventions in enabling environments or institutions, resulting in limited mainstreaming of SLM and CSA management into systemic national or community level approaches, with gender segmentation a further social barrier in the agricultural value chain.

III. STRATEGY

15. Project Objective: To enhance biodiversity conservation and ecosystem services conservation through an expanded and strengthened PA system and with SLM measures integrated in a ridge to reef approach. This will be done through 4 interrelated Strategies/Components as follows:

Component 1. Strengthened institutional framework for Protected Areas, Ecosystem Conservation and Sustainable Land Use;
Component 2. Establishment and effective management of new and existing PAs;
Component 3. Integrated watershed management measures in R2R setting to reduce threats to upstream PA and downstream MPA/MMA;
Component 4. Knowledge management and M&E.

16. Addressing multiple interrelated drivers of biodiversity loss and land degradation requires an integrated approach to abate these losses successfully. This is particularly true in St Vincent and the Grenadines where, as a small SIDS, the transition between ecosystems takes place over short distances and upstream practices have important impacts on downstream and coastal areas. The proposed project strategy recognizes this and will address the drivers through putting in place an integrated ridge-to-reef approach that combines strengthened protected areas as keystone safe havens for threatened and endemic biodiversity, climate smart and sustainable agriculture in intervening areas that will reduce habitat fragmentation and land degradation (PA) that will reduce pressures on PAs and on the remaining habitats in the production landscape, while reducing soil erosion and sedimentation in freshwater and downstream coastal areas. Gender responsive system and sector level training on these best practices and integrated resource management will lift the integrated approach to scale and enable a more comprehensive ridge to reef approach to addressing the interrelated drivers of environmental degradation across the country and ensuring equal access to benefits for men and women.

17. **Project Outcome 1** will focus on strengthening the systemic and institutional and legal framework, availability and access to information to inform gender responsive decision-making, and technical capacities and financial resources. Gaps in the governance framework (policy/legal/regulatory), including gaps in gender responsive policy, will be addressed that strengthen the expanded PA estate and its connectivity with production in the integrated landscape. This will include the development of a Forest Policy and the updating of the existing Protected Area System Plan that integrate LDN, SLM and biodiversity conservation. Enhanced capacities for national data collection and monitoring systems will provide baseline information to support decision-making. These will be supported by a centralized information management database and monitoring system (CIMS), providing multi-institutional access to information for informed gender responsive decision making. This will also include providing services and establishing baselines from which to monitor change, including for LDN baselines and target setting, such as improving soil and water quality monitoring and documenting change in land cover, building on LDN-TSP efforts initiated through the MARFILL. A strengthened legal and regulatory framework, enhanced PA financial sustainability and capacity to implement effective protected area management and its biodiversity and ecosystem services will lead to improved biodiversity conservation and sustainable land management and its mainstreaming into the integrated landscape. Freshwater and nearshore saltwater quality testing will enhance and integrate into the ongoing water quality testing carried out by the Water Resource Management Unit of the Central Water Services Authority, as well as the Ministry of Agriculture's Soil and Water Conservation Unit's ongoing limited water quality sampling efforts. Financial sustainability will build upon efforts of the GEF-funded WB/TNC regional project for OECS countries Sustainable Financing and

Management of Eastern Caribbean Marine Ecosystem Project. The CIMS will incorporate and build upon existing data from the Geonode-based / Caribnode land mapping and data information system gathered through the WB/DRVRP Project, the National soil database gathered as part of the Soil Fertility Mapping Project, and sex-disaggregated socio-economic and livelihood data gathered through the Enhanced Country Poverty Assessment Project.

18. **Project Outcome 2** will focus on expanding the protected area estate and gathering the site-specific baseline data to enable effective site management and biodiversity conservation, including species of global significance. Biodiversity and ecosystem assessments of the terrestrial and marine sites will fill key data gaps that will not only inform site and biodiversity decision-making but will enable the development of species recovery and action plans that, through Project support, will enhance management and protection of 5 key known species of global significance for which essential data is lacking. Through Project support, not only will 5 known species of global significance have enhanced protection but 7 KBAs will receive increased protection and effective management. Research, biodiversity and ecosystem assessments and targeted species censuses and research will provide the baseline data from which species threats can be identified and addressed, including impacts of IAS for which control measures will be implemented. Project will support for site delineation, demarcation with improved monitoring and enforcement will lead to enhanced protection of the sites' resources and threatened species. Protected area business plans will assess med-term financial costs and needs, supported by implementation of site level pilot gender inclusive sustainable finance mechanisms for PA activities over time. The Project's marine biodiversity data collection and monitoring efforts will build upon the TNC/GIZ funded ECMMAN project data collection and training in AGGRA Coral Reef Health monitoring and reporting and the Government of SVG's Fisheries Development Programme efforts addressing sustainable use and protection of marine resources. Boundary demarcation of the Lee Coast Marine Park boundary will be supported through the OECS/WB Agricultural Competitiveness Project. Chatham Bay Wildlife Reserve (proposed) will build on the existing Conservation and Recovery Plan, produced through support from Fauna and Flora International and SVG Preservation Trust funding. The Project will build on these initiatives, in partnership with the Forestry Services, NPRBA and Fisheries Division to further global environmental benefits.

19. **Project Outcome 3** will focus areas on reducing LD in 3 pilot upper watersheds of the Buccament, Kingstown and Yambou watersheds by piloting CSA and SLM practices that will integrate biodiversity benefits and support an increased diversification of household income through sustainable livelihoods, addressing the needs of women and men. These activities will demonstrate the generation of multiple benefits of integrated biodiversity, SLM, agriculture and ecosystem management. Through a strengthened extension service and National Propagation centers enhanced and serving as National training centers for CSA, these practices will be systemically integrated into the MARFFIL programmes and practices. Project support will facilitate access to knowledge, techniques and equipment to support implementation of these CSA and SLM techniques in at least 1200 ha that demonstrates these benefits, build on existing good practices and that also support enhanced production and improved livelihood opportunities for producers and small post-production enterprises. Project support for increased Implementation of these CSA and SLM techniques and practices will help reduce deforestation and environmental impacts, reduce erosion, and improve ground cover that supports biodiversity. The Project will support at least 8 agro-processors and small businesses, of which at least half will be women-owned, through capacity building in production and marketing that will integrate use of CSA produce. These efforts will build on SVG's Reforestation Programme that addresses flood control through reforestation, slope and riverbank stabilization and forest plantation management as well as the Forestry Enhancement Project's efforts to strengthen sustainable watersheds and sustainable livelihoods. These GEF-6 activities will also draw upon Soil Fertility Mapping Project's soil conservation capacity building efforts for the Ministry of Agriculture Extension Services and producers for soil monitoring and management, enhancing capacity and sustainability for reducing land degradation and enhancing environmental benefits.

20. **Project Outcome 4** focuses on capturing both technical and educational knowledge and lessons learned during the implementation of the project to support access to knowledge and information for current and future generations of stakeholders. It is focused on ensuring that knowledge is effectively collected and managed in support of the conservation of BD and ecosystem services in productive landscapes in threatened forested mountainous areas that also benefits men and women. Outcome 4 will consolidate best practices and lessons learned resulting from project implementation and will support the dissemination of lessons learned and experiences at the sub-national (other areas of importance for ecosystem connectivity, PAs, and production landscapes in SVG) and national levels, as well as to other countries in Latin America and the Caribbean. Knowledge and experiences will be captured, shared and disseminated to encourage widespread adoption of CSA, SLM and biodiversity conservation practices. A KAPB survey will be implemented to guide target messages and access changes during project implementation to strengthen messages to address stakeholder knowledge and perceptions. The KAPB will target land use by the agricultural community, specifically farmers

living within the vicinity of the Pas and target watersheds. The project will ensure that sex disaggregated data from the KAPB Survey, socio-economic / livelihood assessment and on experiences and lessons learned generated at the demonstration sites and from implementation of actives are systematically collected, analyzed and disseminated throughout the country and the region to facilitate awareness, replication and scale-up. This outcome will also provide the necessary means for M&E of project results to inform adaptive management and improve the implementation of the project. The Project will build upon and incorporate sex-disaggregated socio-economic and livelihood data gathered through the Enhanced Country Poverty Assessment into its collection, development and dissemination of gender responsive knowledge management activities and materials.

21. The Projects Theory of Change is based on the premise that by addressing SVG's systemic level gaps and insufficiencies in its institutional and legislative framework, availability and access to information to inform decision-making, and technical capacities and financial resources, there will be enhanced ability to implement target and site-specific activities. This premise will be tested through expanding and enhancing effective management of the PA estate, improving management of key species of global significance and increasing implementation of enhanced CSA / SLM techniques in the ridge to reef setting. The effectiveness of these activities will be monitored through the Projects M&E, practices adapted as needed, and lessons learned disseminated for continuous learning. This ToC is also based on the key assumption that access to these enhanced technologies and improved capacities to implement CSA /SLM, PA management and biodiversity conservation will result in their adoption and ultimately lead to reduced land degradation and increased conservation of biodiversity. This includes the assumption that there is political will to support an expanded PA estate, the objectives of biodiversity conservation and of INRM, SLM and sustainable production practices and the mainstreaming of biodiversity conservation. This also includes the assumption that there is commitment of local stakeholders to biodiversity conservation and PA management, as well as there are enough demonstrated benefits to support a commitment by local stakeholders to incorporate sustainable climate smart productive practices into existing farming practices.

Global Environmental Benefits

22. The project will deliver GEBs related to BD conservation and reduced land degradation. This will be achieved through equal participation by men and women, ensuring that both benefit equally from the project and that the concerns and experiences of the women are an integral part of the development, implementation and monitoring and evaluation of the project. The project will deliver the following global environmental benefits.

Biodiversity:

- Enhanced conservation of 7 Key Biodiversity Areas (KBAs, in one 1 KBA Corridor[23] that are also IBAs and 1 AZE site);
- 3 PAs totaling (at minimum) 13,277 ha[24] terrestrial and 2,318 ha marine, that are under improved protection and management;
- Sole remaining habitat (at minimum 63 ha) of the Critically Endangered *Gonatodes daudini* under protection;
- Improved management (measured by METT) effectiveness in 3 PAs;
- Improved management of five (5) globally significant biodiversity (Vulnerable endemic St Vincent Parrot *Amazona guildingii*, Critically Endangered St Vincent Blacksnake *Chironius vincenti*, Endangered Saint Vincent frog *Pristimantis shrevei*, Endangered Whistling Warbler *Catharopeza bishopi*, and Critically Endangered Grenadines clawed gecko *Gonatodes daudini* with Species Recovery and Action Plans in place and implementation initiated
- Improved management of four 14 restricted range bird species (and its 7 KBAs, also Important Bird Areas) (including the threatened endemic *Amazona guildingii* - Vulnerable and *Catharopeza bishopi* - Endangered);
- 2026 ha in the R2R setting provides connectivity between key upper watershed forests, riparian and dry coastal forest and marine ecosystems with sustainable practices that support biodiversity conservation;
- Improved BD conservation in the Project's area of influence of 22,578 ha[25] (terrestrial) and 2,318 (marine) through direct interventions and indirect downstream impacts.

Land Degradation

[23] The Critical Ecosystem Partnership Fund (CEF) Caribbean Ecosystem Profile (of KBAs) refers to this site as the Central Mountain Range Conservation Corridor

[24] 13,214 ha (CMFR) + 63 ha (Chatham Bay)

[25] Terrestrial = 13,214 ha (CMFR) + 63 ha (Chatham Bay) + 3 Watersheds (Buccament: 2,026 ha, Kingstown: 5,225 ha, Yambou: 3,336 ha) – 1286 ha (watershed overlap with CMFR)

- Expanded implementation of CSA-SLM techniques and technologies by government and local producers with strengthened capacities in 3 upper watersheds covering at minimum 1,200 ha reduce the drivers of environmental degradation and contribute to the conservation of forest, soil water resources and ecosystem functions.
- 846 farmers / producers / agroprocessors / small business entrepenuers[26] in 3 watersheds apply climate smart agricultural practices and benefit from enhanced support from upgraded propagation centers and trainings that result in reduced land degradation (pollution, sedimentation) and enhanced sustainable livelihoods.
- Reduced soil degradation and siltation in rivers and near-shore coastal areas from unsustainable farming and land management activities.

23. The project's strategy includes actions to address objectives of the GEF Biodiversity (BD) Focal Area, the Land Degradation and the (LD) Focal Area. Area. More specifically, the project is framed within BD Objective 1 (BD-1: Improve Sustainability of Protected Area Systems, Program 1: Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure, and Program 2. Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate) and LD Objective 3 (LD-3: LD – 3: Reduce pressures on natural resources by managing competing, Program 4: Scaling-up sustainable land management through the Landscape Approach.

24. This Project generates GEBs by contributing to Aichi Targets that meet Strategic Goal A-Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society (Target 1 & 4); Strategic Goal B-Reduce the direct pressures on biodiversity and promote sustainable use (Target 5, 7, 8 and 10); Strategic Goal C-To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity (Target 12); and Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services (Target 14).

25. This project supports the strategic objective of SVG's National Economic and Social Development Plan 2013-2025, Goal 4 of "Improving Physical Infrastructure, Preserving the Environment and Building Resilience to Climate Change." More specifically, Goal 4.1 To ensure an adequate, safe, reliable and sustainable supply of water; Goal 4.7 To conserve the natural resources of the country through effective utilization and management, and Goal 4.10 To reduce the adverse impacts of climate change. The project will help SVG meet its commitments under the St George Declaration (2006) and the Caribbean Challenge initiative to protect 20% of the near-shore marine environment by 2020. The proposed project is addressing priority targets in the 5th Report to CBD and the draft National Biodiversity Strategy and Action Plan (NBSAP, 2015) of which the 20/20 key targets are: 1) at least 50% of the population is knowledgeable about the values of biodiversity and the steps they can take to conserve and use it sustainably; 2) studies establishing the status of all natural habitats and the rate of habitat loss, including forest, and a strategy to reduce the rate of habitat loss; 3) priority invasive alien species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment; 4) at least 17% cent of terrestrial and inland water, and 10% of coastal and marine areas of particular importance for biodiversity and ecosystem services, conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes; and 5) ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

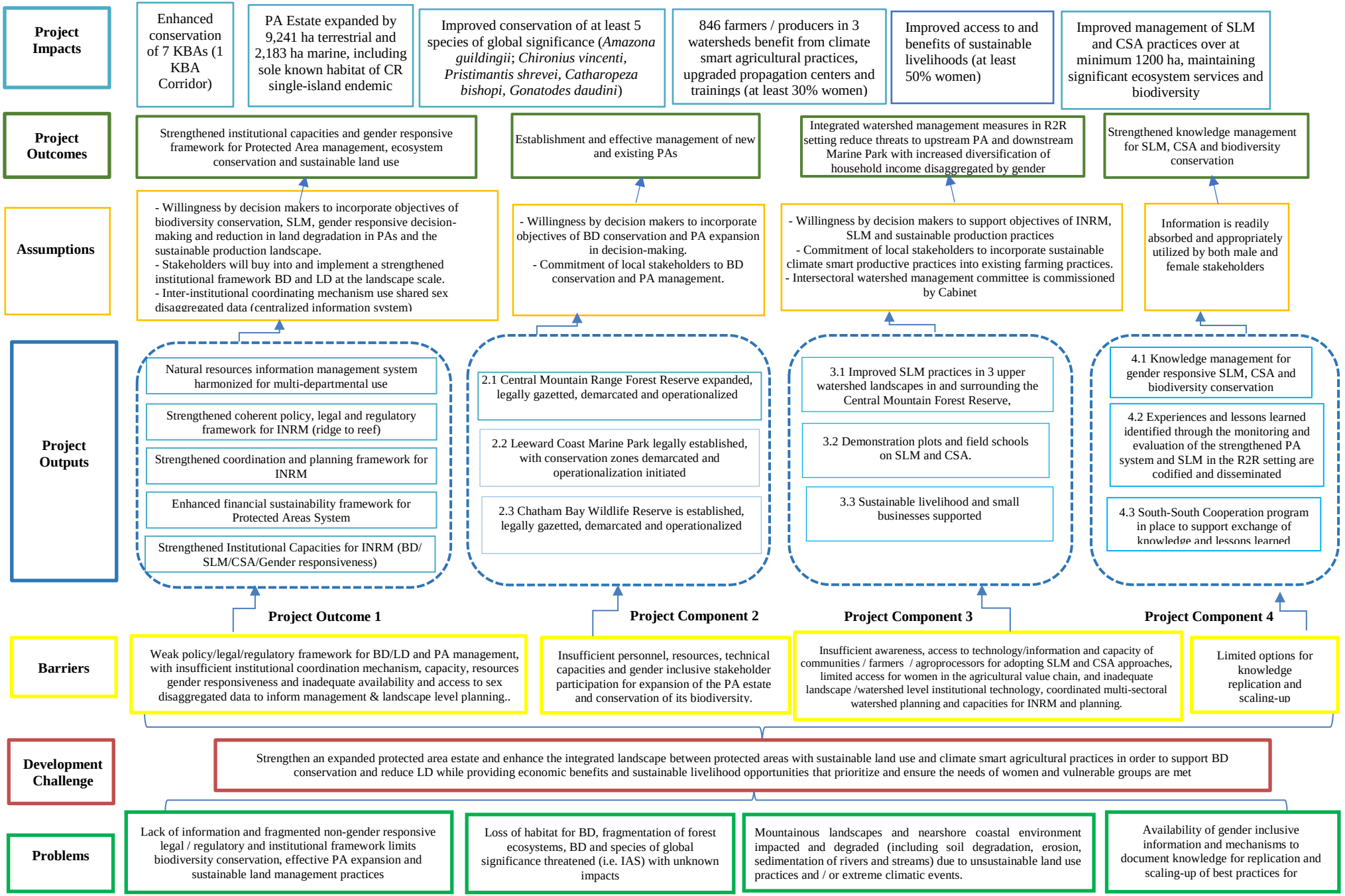
26. The project also promotes the objectives of the newly aligned National Adaptation Plan (NAP, 2015) to support the UN Convention to Combat Desertification, and seeks to prevent land degradation, restore 10% of degraded land by 2020 (maintaining a minimum of 28% forest cover, though 35% indicated as preferential yet unrealistic), improve agricultural technology for greater yields and soil conservation, secure all water-catchment areas in a joint venture between CWSA and forestry, strengthen public awareness initiatives to increase partnerships in environmental resource management and mitigate the effects of drought and other climatic shocks, using an integrated approach for land degradation reduction and drought mitigation. This project also supports SVG's National Physical Development Plan by addressing some fundamental land issues facing SVG by contributing to zoning, protecting coastal zones and controlling deforestation and forest loss, a parallel effort to the OECS Land Policy that aims to achieve "enhanced sustainability of development in the OECS – economic development, poverty reduction, social stability and the protection of environmentally sensitive areas." In addition, the National Parks and Protected Area System Plan (2010-2014) is directly

[26] Target will be confirmed during Year 1 of Project implementation and monitored throughout project implementation.

supported through legal designation of new protected areas and the update of the system plan to support national, regional and international commitments (i.e. Caribbean Challenge Initiative, St. George's Declaration, UNCBD).

27. The project is consistent with the 2017-2021 United Nations Multi-Country Sustainable Framework (UN MSDF), a regional United Nations Development Assistance Framework (UNDAF) for Barbados and the OECS, including SVG, which promotes inclusive and sustainable solutions for the conservation, restoration, and use of ecosystems and natural resources as one of its programme outcomes.

28. In addition, the project is part of United Nations Development Program's (UNDP) effort to support the progress of SVG towards achieving the Sustainable Development Goals (SDGs). In particular, the project will contribute to achieving Goal 2: Promote sustainable agriculture (Goals 2.3 and 2.4); Goal 5: Achieve gender equality and empower all women and girls; Goal 8 (indirectly) through conservation of ecosystem services essential for economic growth, Goal 12: Sustainable consumption and production; and Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.


Project Impacts
Enhanced conservation of 7 KBAs (1 KBA Corridor)
PA Estate expanded by 9,241 ha terrestrial and 2,183 ha marine, including sole known habitat of CR single-island endemic
Improved conservation of at least 5 species of global significance (*Amazona guildingii*; *Chironius vincenti*, *Pristimantis shrevei*, *Catharopeza bishopi*, *Gonatodes daudini*)
846 farmers / producers in 3 watersheds benefit from climate smart agricultural practices, upgraded propagation centers and trainings (at least 30% women)
Improved access to and benefits of sustainable livelihoods (at least 50% women)
Improved management of SLM and CSA practices over at minimum 1200 ha, maintaining significant ecosystem services and biodiversity
Project Outcomes
Strengthened institutional capacities and gender responsive framework for Protected Area management, ecosystem conservation and sustainable land use
Establishment and effective management of new and existing PAs
Integrated watershed management measures in R2R setting reduce threats to upstream PA and downstream Marine Park with increased diversification of household income disaggregated by gender
Strengthened knowledge management for SLM, CSA and biodiversity conservation
Assumptions
- Willingness by decision makers to incorporate objectives of biodiversity conservation, SLM, gender responsive decision-making and reduction in land degradation in PAs and the sustainable production landscape.
- Stakeholders will buy into and implement a strengthened institutional framework BD and LD at the landscape scale.
- Inter-institutional coordinating mechanism use shared sex disaggregated data (centralized information system)
- Willingness by decision makers to incorporate objectives of BD conservation and PA expansion in decision-making.
- Commitment of local stakeholders to BD conservation and PA management.
- Willingness by decision makers to support objectives of INRM, SLM and sustainable production practices
- Commitment of local stakeholders to incorporate sustainable climate smart productive practices into existing farming practices.
- Intersectoral watershed management committee is commissioned by Cabinet
Information is readily absorbed and appropriately utilized by both male and female stakeholders
Project Outputs
Natural resources information management system harmonized for multi-departmental use
Strengthened coherent policy, legal and regulatory framework for INRM (ridge to reef)
Strengthened coordination and planning framework for INRM
Enhanced financial sustainability framework for Protected Areas System
Strengthened Institutional Capacities for INRM (BD/ SLM/CSA/Gender responsiveness)
2.1 Central Mountain Range Forest Reserve expanded, legally gazetted, demarcated and operationalized
2.2 Leeward Coast Marine Park legally established, with conservation zones demarcated and operationalization initiated
2.3 Chatham Bay Wildlife Reserve is established, legally gazetted, demarcated and operationalized
3.1 Improved SLM practices in 3 upper watershed landscapes in and surrounding the Central Mountain Forest Reserve,
3.2 Demonstration plots and field schools on SLM and CSA.
3.3 Sustainable livelihood and small businesses supported
4.1 Knowledge management for gender responsive SLM, CSA and biodiversity conservation
4.2 Experiences and lessons learned identified through the monitoring and evaluation of the strengthened PA system and SLM in the R2R setting are codified and disseminated
4.3 South-South Cooperation program in place to support exchange of knowledge and lessons learned
Project Outcome 1
Project Component 2
Project Component 3
Project Component 4
Barriers
Weak policy/legal/regulatory framework for BD/LD and PA management, with insufficient institutional coordination mechanism, capacity, resources gender responsiveness and inadequate availability and access to sex disaggregated data to inform management & landscape level planning..
Insufficient personnel, resources, technical capacities and gender inclusive stakeholder participation for expansion of the PA estate and conservation of its biodiversity.
Insufficient awareness, access to technology/information and capacity of communities / farmers / agroprocessors for adopting SLM and CSA approaches, limited access for women in the agricultural value chain, and inadequate landscape /watershed level institutional technology, coordinated multi-sectoral watershed planning and capacities for INRM and planning.
Limited options for knowledge replication and scaling-up
Development Challenge
Strengthen an expanded protected area estate and enhance the integrated landscape between protected areas with sustainable land use and climate smart agricultural practices in order to support BD conservation and reduce LD while providing economic benefits and sustainable livelihood opportunities that prioritize and ensure the needs of women and vulnerable groups are met
Problems
Lack of information and fragmented non-gender responsive legal / regulatory and institutional framework limits biodiversity conservation, effective PA expansion and sustainable land management practices
Loss of habitat for BD, fragmentation of forest ecosystems, BD and species of global significance threatened (i.e. IAS) with unknown impacts
Mountainous landscapes and nearshore coastal environment impacted and degraded (including soil degradation, erosion, sedimentation of rivers and streams) due to unsustainable land use practices and / or extreme climatic events.
Availability of gender inclusive information and mechanisms to document knowledge for replication and scaling-up of best practices for

IV. RESULTS AND PARTNERSHIPS

Component 1: Strengthened institutional framework for Protected Areas, Ecosystem Conservation and Sustainable Land Use.

Outcome 1.1 Enhanced multi-departmental access to centralized database system, incorporating biodiversity (BD), ecosystem services, land use / cover, protected areas, climate and soil data, to support natural resource conservation and gender responsive land use decision making.

Outcome 1.2 Institutional frameworks and human resource capacities strengthened for the operationalization of the Forest Policy, PA Policy and PA system plan as well as for the implementation of related laws and regulations, resulting in improved biodiversity and ecosystem conservation and reduced forest loss and land degradation.

Outcome 1.3 Increased capacities for financial sustainability of PAs.

Output 1.1 Natural resources information management system harmonized for multi-departmental use.

29. *Output 1.1.1 A centralized, geo-referenced Biodiversity and Land Use Database with a Biodiversity and Land Use Monitoring and Tracking Tool***.** This project output will strengthen the evidence base required for improved PA governance and decision-making per the National Land Policy (Directive 3.1) for the development of a National GIS system. At present, information on ecological conditions and trends, land uses, priority habitat and species, threats, etc. relevant to the existing and potential terrestrial and marine PAs is limited and fragmented. It is maintained by a variety of agencies in differing formats, and access to existing information is often limited to informal relationships between departments[27]. The Project will support the development of a Biodiversity and Land Use Database, a Centralized Information Management System (CIMS) that will strengthen multi-agency access to natural resource information at the national, landscape and site level. This CIMS will be integrated into government's IT Department, who will manage servers and backups, supporting sustainability post project implementation. Information included in this database will cover biodiversity, IAS management, PAs, SLM and CSA. The CIMS will incorporate data management, sharing and integration protocols that will include data sources, roles, responsibilities and access frameworks to and from multiple agencies and other designated users. A Functional Specification Document and Standard Operating Procedures will also be developed. To further strengthen biodiversity and land use planning / management approaches, the project will build on existing databases, including the Forestry Services[28] geographic information system (GIS) and its information related to land cover, soil types, agriculture, and PA coverage, the Geonode-based Caribnode land mapping / data information system (developed through the WB/DRVRP Project and managed by the Physical Planning Department), the National soil database (part of the Soil Fertility Map Project). It will be developed to enable links to the proposed National GIS.

30. Outputs from all spatial and non-spatial information, including data collection and monitoring activities and technical reports produced, will be incorporated into the CIMS. This will increase the accuracy and detail of the information needed to support policy and evidence-based management decisions. The CIMS will also accommodate non-spatial data, providing ease of access to relevant research, technical and project reports. It will also serve as the central repository for geo-referenced progress and monitoring data, and will incorporate sex disaggregated socio-economic livelihood data. The development of the necessary monitoring programmes and data gathering protocols as detailed in Sub-output 1.1.2.

31. The Forestry Service's Forest Mapping and Inventory Unit, known as the GIS Unit, serves as the central GIS unit for the Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour (MARFFIL). The Project will support this GIS Unit by strengthening its capabilities (including ArcGIS trained personnel and equipment / software). The Project will ensure that capacity building and training is also provided to all relevant agencies[29] on access to and use of the database and software (integrated into Output 1.5). This includes training support for any agency specific data recording / entry and monitoring programmes developed, such as the Soil Conservation Monitoring Programme (Output 1.1.2). The capacity of the GIS Unit will be

[27] Saint Vincent and the Grenadines National Parks, Rivers and Beaches Authority. 2009. National Parks and Protected Areas System Plan 2009-2014. 52 pp.

[28] In 2017, the Forestry Department was renamed the Forestry Services

[29] Forestry Services; Fisheries Division; Agriculture Department; Soil and Water Conservation Unit; Physical Planning Unit; National Parks, Rivers and Beaches Authority, others TBD.

further enhanced with the provision of GIS software licenses (for ArcGIS), faster computers and larger data storage capacities that are needed for classifying and analyzing multispectral data. The need for more advanced training for key GIS staff in classification techniques of satellite images and remote-sensing processing (including equipment and software) will also be explored. Hardware and software, including equipment for at minimum 6 stations will be supported, with servers (2) and backups integrated into Government's Information Technology Services Division.

32. *Output 1.1.2 National SLM and BD monitoring and data gathering and monitoring programmes established.* To support national capacity and sustainability, the Project will develop monitoring programmes and data gathering protocols that will be integrated into the CIMS. These will include data outputs gathered and monitoring programmes developed throughout the various Project components. These monitoring programmes will support sustainable long-term monitoring efforts for SLM, BD and ecosystem health, such as species data to monitor census and population changes, and invasive species control as they will be institutionalized within key National agencies[30] with equipment and supported by enhanced technical capacities and data collection and monitoring systems integrated into existing work programmes. The results of these activities (i.e. water quality testing) will provide the data to inform decision-making, and adapt on-the-ground activities to improve those results. National level programmes will be established to monitor key indicators changes in land coverage, forest conversions, CC impacts (i.e. floods and landslides), and species distributions. The monitoring programmes and protocols will be developed using SMART indicators and will support LDN target setting, and national biodiversity and PA targets as outlined in the National Biodiversity Strategy and Action Plan, Caribbean Challenge Initiative, and National Parks and Protected Areas System Plan.

i. A Freshwater and Saltwater Quality Testing Programme will be enhanced and implemented. Freshwater and saltwater quality testing, monitoring and advisory capacities will be enhanced as a monitoring tool for coastal water quality, nearshore pollution, reef sedimentation, and land degradation in upstream areas. The MARFFIL's multi-departmental testing capacities will be supported with equipment and training. To support LDN target setting and ensure that national targets for LD/LDN are appropriately measured, indicators will be developed, and data gathering, and monitoring protocols improved. The Water Resource Management Unit (WRMU) of the Central Water and Sewage Authority (CWSA) maintains a hydrological database. The WRMU provides water quality and water flow data and information to government ministries, non-government institutions. The WRMU is involved in assessing the status and overall management of freshwater resources in SVG. In the watersheds above the CWSA water intakes, the WRMU monitors hydrological (surface runoff, stream flow, ground water, and precipitation) and meteorological parameters (rainfall, air temperature, relative humidity, air pressure, solar radiation, evaporation, wind speed and soil temperature). US Coral Reef Task Forces Watershed Partnership Initiative[31]priority indicators for potential stressor in watersheds will be monitored and incorporated into the R2R pilot watershed Buccament watershed monitoring programmes (linked with Output 3.2), including Total Nitrogen/TN[32] and total suspended solids, supported by the provision of field testing and CWSA lab equipment. The MARFFIL's Soil and Water Conservation Unit (SWCU) currently monitors sedimentation in rivers in watersheds below the CWSA managed water intakes, but works without geo-referenced locations, adequately functioning testing equipment, nor a computer to input data. A Project supported MOU will develop this collaboration and expand CWSA water testing and lab analysis to include downstream sites. In this capacity, the Project will support freshwater testing capacity building in the Government's SWCA with training and field equipment, field and office computer to input data, and GPS units to geo-reference measurement locations. Supported by training (Component 1.5), this enhanced capacity will further national capacity to identify and quantify nutrient and chemical properties found in both water sources and soil content (linked with Soil Conservation Monitoring Programme, below) and support the monitoring of changes in watershed land use practices and stressors.

ii. Soil Conservation Monitoring Programme will be developed to strengthen and systematize data gathering, recording and monitoring activities. The SWCA is responsible for implementing and monitoring soil conservation measures implemented throughout the island, including within the Forest Reserves in the upper watersheds and for monitoring farming practices. The SWCA also has been collecting data on soil conservation measures implemented island-wise since 2005. These sites are not georeferenced due to absence of GPS units and training. There are no protocols for data collection or monitoring, and no

[30] Forestry Services, Fisheries Division, National Parks Rivers and Beaches Authority, Physical Planning, Agriculture Department, other. TBD.

[31] S. Holst Rice, P. Bradley, H. Slay, W. Wiltse, D. Polhemus, C. Storlazzi, T. Montgomery, P. Sturm, R. Viqueira, T. Callender, M. Curtis, and J. Dean. 2016. United States Coral Reef Task Force Watershed Partnership Initiative: Priority Ecosystem Indicators. Washington, DC. 56pp.

[32] US federal and state regulatory agencies recommend using Total Nitrogen concentrations (TN) as the best measure of year-round availability of nitrogen nutrients (EPA 2001).

computer to enter or analyze data. The Project will develop a Soil Conservation Monitoring Programme that will include data collection and monitoring protocols and spatial linkages for record input. These soil conservation measures will also support the baseline data for LND-TSP, as well as the protocols and indicators that support the LDN target setting process. Soil testing will be supported by the Plant Propagation Unit using existing equipment provided through the Soil Fertility Mapping Project. The outputs of this data collection and monitoring effort will be integrated into the CIMS (Output 1.1.1).

iii. High resolution satellite imagery (20 cm) and drone technology. Existing current satellite images in use do not have sufficient resolution to support soil and land cover mapping to develop a baseline. Current high-resolution images being used by the Forestry Services date back to 2007. High-resolution satellite imagery will be procured to enable creation of a baseline for land cover/use and to serve as the basis for documenting changes and to support Project activities, including LDN-TSP/baseline, boundary delineation for all 3 target PAs (Component 2), PA and INRM/watershed land use/management planning. It will also support the gazetting and monitoring process. Satellite imagery will replace a cadastral survey to delineate the Central Mountain Forest Reserve (CMFR) boundary using geo-referenced points that will be ground-truthed and demarcated. Drone technology supporting the identification and geo-referencing of inaccessible parts of the proposed forest reserve boundary will also support monitoring over time, particularly in the site's periphery and difficult to access sections, reducing manpower needs and increasing safety in those areas of possible illegal activities.

iv. LDN Target Setting Protocols. While St Vincent is a signatory to UNCCD and has initiated the LDN Target Setting Process (LDN-TSP), little progress has been made. The lack of high-resolution satellite imagery has further prevented the country from establishing a baseline or voluntary LD targets nor are there identified measures to target tracking / achievement. The Project will support Government in establishing protocols for monitoring and evaluation of SLM practices, complemented by high-resolution satellite imagery (see above). Existing monitoring protocols will be enhanced to align with monitoring and indicators for LDN-TSP. Protocols developed will consist of a checklist for key LD-related issues (e.g., soil micronutrient content, vegetation cover) and SLM-related practices (e.g., effects of existing and new SLM practices on LD conditions), as well as guidance tools on establishing baseline data and monitoring changes. Of the 3 SLM indicators used in the LDN-TSP, project data will support the tracking of two (land cover and soil micronutrient content[33]). Guidance tools on establishing baseline data and the monitoring of changes will also be developed and supported with the necessary stakeholder participation / workshops, technical training and capacity building for data analysis. This will include training for key GIS personnel from the Forestry Services and from the Physical Planning Unit (others may be identified) for satellite imagery interpretation and classification, with hardware and software provided.

v. Baseline gender responsive socio-economic and livelihood survey and analysis and Livelihood Action Plan. Gender responsive socio-economic / livelihood survey and data gathering protocols will be developed and a detailed survey implemented. Emerging areas of priority and the vulnerabilities to be addressed as well as the types of data needed will first identified and will guide baseline data collection. This survey and analysis will include the collection of socio-economic / sex disaggregated land use and baseline livelihood / household data for communities in and surrounding the Project target areas to ensure that national and site-level management decision-making are gender responsive, and appropriately addresses community and stakeholder needs. A strategic approach to addressing data gaps identified during the PPG phase will inform the collection of site and community level data, particularly for data associated with women, vulnerable populations and youth. Qualitative and quantitative tools will be developed, and all collected data will be incorporated in the centralized CIMS. These tools will be location specific and include the collection of social indicators, including but not limited to sex, age, community of origin, natural resources and ecosystem services use, access to and ownership to land, land tenure arrangements, etc. Incorporating outputs of the baseline gender responsive socio-economic and livelihood survey, a Livelihood Action Plan will be developed and integrated into site management planning and decision-making impacting resource users and livelihoods. This activity will support management of SESP Risk 2, which identifies that women might not fully participate and contribute to design and implementation and might not have equal access to project benefits.

33. *Output 1.1.3 Biodiversity Interpretation Center* will be supported as the focus for Project and BD/INRM outreach, training and data access/link with the CIMS. The Biodiversity Interpretation Center will be located within theForestry Services compound, strengthening existing outreach and education activities. Given Project budget constraints, the Project will support a Biodiversity

[33] Project activities do not support the tracking of below-ground carbon stocks

Interpretation Center on the Forestry Services compound in an existing storage building, where interpretation of tree seedling propagation and other activities currently take place. This Sub-output will integrate with various components of the Project, including Output 1.5 (institutional capacity building to implement Project activities), Sub-output 1.1.2 (decision-making tools, surveys, assessments and planning associated with protected area planning, development), and operationalization and activities supported to enhance conservation and protection of species of global significance and their habitats (Components 2 & 3). These activities will include upgrading of the interior of the building and equipping with office equipment to support an office and training room, additional interpretation facilities, and storage to house outputs of BD and ecological assessment, including plant collection cataloguing and storage, a terminal for the CIMS (through a central database terminal for data input and use), and biodiversity interpretation/exhibits for public outreach. This Biodiversity Interpretation Center will help ensure the dissemination of information on the importance of biodiversity, ecosystem services, land degradation and how land use practices and actions can impact biodiversity as well as ecosystem services upon with the Nation of SVG depends. This site will also serve as an interpretation center for school programmes, visitors and Vincentians, and also serve as a training center to support capacity building activities as part of Output 1.5. The grounds around the Center will also serve as a demonstration site for native seedling propagation for reforestation efforts under this Project, with an interpretive trail extending from the Center into the Camden Park Forest Reserve (also a KBA) near to the site.

Output 1.2. Strengthened coherence of policy, legal and regulatory framework for INRM (ridge to reef), biodiversity conservation, and protected areas.

34. A comprehensive governance framework is necessary to establish and strengthen procedures and standards for PAs, Forests and integrated natural resource management, as articulated in the National Economic and Social Development Plan/NESDP 2010-2025 (Policy Directive 1). The Project will conduct a comprehensive review that will identify gaps and overlaps within existing legislation that supports protected area designation, biodiversity conservation, IAS management and the need for coordination of management responsibilities for watershed management. This consultative process, as with the stakeholder participatory consultative process throughout the Project, will work with a Community Engagement Specialist and the Project Gender Specialist to ensure access to women, including in rural communities, to resources and the participatory process. This process helps address the risk (SESP) The Project will incorporate a gender gap analysis into this comprehensive review, along with an awareness and sensitization seminar on gender data and its importance for policy makers and local level stakeholders. This seminar will also incorporate gender awareness and gender mainstreaming for policy makers and local level stakeholders including NGOS to sensitize and raise awareness of the need for gender responsive policies in general and in INRM (addressing SESP Risk 2 that women might not fully participate and contribute to design and implementation and might not have equal access to project benefits). This activity supports Government's 2009 adoption of a gender-equality policy, seeking to ensure that policies, programmes and practices are gender responsive.

35. The result will be recommendations based on existing (enacted and draft) policy, legislation and regulations, as needed based on legislative and regulatory review[34] to identify overlaps, gaps / related capacity issues for identification of a comprehensive gender-inclusive governance framework. The policy review will ensure that inter-agency cooperation mechanisms are addressed at the Policy level to make the co-management MOU rules and processes more effective, with a specific cooperation mechanism identified for integrated watersheds management. The Project will also support the development of new, and finalization of, draft policy, legislation and regulation, identified by key government partners.

36. As part of the PPG phase, extensive stakeholder consultations took place with key government stakeholders identified key policy, legislative, regulatory and related gender gaps. There is no Forest Policy for SVG. The Project will support development of a Forest Policy to provide a framework for all forest and integrated natural resources management and incorporate inter-agency coordination mechanisms for collaboration between Ministries, Departments and Agencies/Authorities responsible for management of the nation's natural resources for landscape level planning. This would be a comprehensive policy that integrates National priorities, such as those identified in SVG NBSAP (2010-2014), as well as regional and international obligations (i.e., CBD, UNFFF, CCI, Grenada Declaration). This policy would also support identification and achievement of LDN target_for Cabinet Submission and will be gender responsive. Policy development will occur through a national and participatory consultative process, following the example of the Forest Policy development process for Grenada and ensuring broad stakeholder participation, including by woman and other vulnerable groups. The Project will also support the updating of the Protected Area Policy, currently

[34] Including the OPPAL Gardner 2007 review

a policy statement included within the SVG System Plan for Parks and Protected Areas (2010-2014). This update will be integrated into the revision process for the System Plan carried out under Output 1.3.

37. The National Parks Act (2002, amended 2010), legislation that created the National Parks, River and Beaches Authority and outlines its functions including the responsibility of managing the SVG National Parks and Protected Area System, has no approved regulations. CITES legislation is needed to ensure compliance as a signatory to CITES, including for the *Gonatodes daudini* that is being traded internationally (Appendix 1 listing to be presented at the next COP). The Project will support the review, updating and submission of the drafted regulations[35] for Cabinet submission. These regulations are also essential for anchoring site management arrangement in law (i.e. management plans, delegation instruments, concessions and concession fees, etc.). The Wildlife Protection Act (1987) provides authority to establish bird sanctuaries as Wildlife Reserves, but no regulations have been written for this Act. Both the 3,075 ha St Vincent Parrot Reserve (within the proposed CMFR and with overlapping designation with the Cumberland Forest Reserve) and the 7 ha Chateaubelair Islet (for seabird conservation) within the proposed Leeward Coast Marine Park (LCMP) have been declared under this Act. Overlapping designations will be addressed through this review, including consideration of consolidation of sites as proposed by Jackson (2004). Further, the Project will support the development and submission to Cabinet of regulations for the Forest Resources Conservation Act (1992) under which Crown land is declared a Forest Reserve for the purposes of sustained production of timber and water, the conservation of soils, public recreation and preservation of flora and fauna. This key Act that also supports the declaration of conservation areas has no written Regulations. As most of the thirteen watersheds are in crown lands and are protected under this this Act, supporting the development of Regulations provides the opportunity to comprehensively address integrated natural resource management, particularly for watersheds, as well as essential agency coordination mechanism (Output 1.3) for its effective implementation.

38. Formal government enactment of these legal processes, through Cabinet approval, or legal gazette, is outside the control of the Project, and is likely to extend beyond the Project implementation time period. The Project, however, will ensure an extensive, comprehensive and gender inclusive participatory consultative process (addressing SESP Risk 2) for these governance instruments be undertaken, addressing concerns and issues that will further support the development, updating and finalization of policy, legal and regulations frames and their enactment.

Output 1.3 Strengthened coordination and planning framework for INRM, SLM, BD and PA.

39. <u>*Output 1.3.1.*</u> *The National Parks and Protected Areas System Plan (NPPASP, 2010-2014) will be revised in a national participatory consultative process that ensures broad stakeholder participation including for women and other vulnerable groups to ensure benefits to both*. Revisions to the NPPASP will ensure the incorporation the CCI 20/20 targets and the Grenada Declaration, committing the Government to a national target of 25% near-shore area by 2020, SVG priority NBSAP targets of 17% terrestrial conservation other international / national / regional commitments (e.g., SDGs). As appropriate, the National Implementation Support Programme (NISP) committee will reconvene and support the alignment of these efforts and their contribution to the UNCBD Program of Works for Protected Areas (PoWPA). A landscape / seascape approach to overall system planning will be incorporated to support connectivity/corridors/buffers and integration into government land use planning process. Sex disaggregated data from the socio-economic / livelihood assessment and (Output 1.1) will be used to ensure a gender responsive planning framework, addressing Risk 2 identified in the SESP. Consolidating site designations will be addressed in the NPPSAP update, incorporating where relevant recommendations by Jackson (2004)[36] for consolidation of the target sites themselves. An example of this is the proposed CMFR, which currently consists of 1 proposed National Park, 5 proposed and 1 designated Forest Reserves. Further, priority will be placed on protecting SVG's ecosystems, including the habitat for its species of global significance. The revised NPSASP will include guidelines for management that continue to support co-management, community participation, male and female resource users both in and outside the PAs and conservation in adjacent, productive landscapes. Extensive community outreach will help ensure the gender inclusive participatory process is well conveyed and described for more effective participation, including participation vulnerable groups from rural communities with the support of the Community Engagement Specialist.

40. <u>*Output 1.3.2*</u> *Inter-agency coordination strengthened***.** Inter-sectoral integration was identified in the SVG National Protected Areas System Capacity Development Plan (2007) as a critical management capacity strategic direction. This includes joint

[35] The regulations were drafted through the Tourism Development Project, Ministry of Tourism and the European Union

[36] Jackson, I. 2004. Master Plan: System of Protected Areas and Heritage Sites, St. Vincent and the Grenadines.

planning sessions between agencies, defining roles and responsibilities, and improved communications between all stakeholders. It is of particular significance for PAs and INRM in SVG that are managed by multiple, overlapping agencies and ministries, each guided by its own mission and priorities. The Inter-agency coordination mechanism, drawn from the various ministries and statutory bodies responsible for environmental management (i.e., Fisheries Division, Forestry Service, NRBPA, Physical Planning, CWSA, SVG Coast Guard, SVG Port Authority, amongst others) will be strengthened for the management of PAs, biodiversity and INRM. To date, MOUs between agencies have been ineffective in ensuring ongoing coordination, with existing collaboration most often based on informal long-term working relationship. As such, the Project will hire a consultant to assess potential coordination mechanisms, as well as the policy and legal framework (linked with output 1.2.1), and based on this assessment, implement agreed-to actions to address barriers and lessons learned for successful multi-departmental and multi-sectoral collaboration on PAs and natural resources/ecosystem services in the Project watershed. In addition, efforts will be made to reactivate the Cabinet appointed National Environmental Advisory Board (NEAB)—an 11-member board from key agencies—to provide advisory capacities / technical support for PA and watershed related technical issues and decisions. The Project will support development of guidelines for the NEAB to identify oversight roles and responsibilities. Until the NEAB is activated, the Project Steering Committee (during Project inception) will activate a Technical Advisory Committee to provide technical oversight for Project technical components, with specific note for INRM activities in the Project pilot R2R intervention site in the Buccament Valley. This Technical Advisory Committee has the potential to be linked to the NEAB.

Output 1.4 Enhanced financial sustainability framework for Protected Areas System.

41. SVG has made important advances in addressing sustainable financing for its PA system. A 2007 Sustainable Finance Plan[37] for its PA system provided financial analysis to identify the projected funding gap through 2020 and an analysis of potential funding strategies. Sustainable financing mechanisms were then incorporated into the NPPASP (2010-2014), and their implementation initiated. Coarse costing for MPA Sustainable Finance Needs was carried out in 2017 as part of a 4 OECS islands review (. It identified an optimal level of US$7.75-7.9M annual recurrent cost for protection of 20% (i.e., 408 km^2) of the SVG's marine area, with a US$5.4M gap identified (inclusive of US$2.9M in proposed additional revenue)[38]. Further, SVG is a signatory to the Caribbean Challenge Initiative (CCI), and within that framework is a participant in the GEF-funded WB/TNC regional project for OECS countries Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project. The National Trust fund (Caribbean Biodiversity Fund) has been legally established and by-laws are in place. The Trust Fund Board is in place, and its Director hired. Despite this progress, the sustainable financing mechanisms implemented do not support Trust Fund capitalization or PA financing needs. The Project will facilitate a process to help improve the financial sustainability of the expanded PA system to benefit both men and women (addressing SESP Risk 2), and will undertake the following tasks:

i. Engage a Sustainable Finance Consultant to review and assess the existing legal and institutional conditions for sustainable financing, including gaps in gender responsiveness and IAS, to help identify barriers to Trust Fund capitalization, and support implementation of identified and agreed-to changes.
ii. Develop a PA System Business Plan / Financial needs assessment (Sustainable Financing). Three (3) gender responsive site-specific PA Business / Financing plans (Chatham Bay, LCMP Conservation Zone and CMFR) identifying financial needs and a gap assessment will also be developed as part of Component 2. This PA System Business (Sustainable Financing) Plan will build on existing financial assessments[39] and establish a costs and revenue projection based on national, regional and international best practice and address gaps identified in the METT's Financial Sustainability Scorecard. Gender responsive site based financial plans will interlock with and be developed concurrently with the overall PA management plan. Particular emphasis will be placed on designing, financing and demonstrating cost-effective approaches to conserving globally significant biodiversity, including IAS management to support conservation of species of national/regional/global significance, implementation of site management plans (Outputs 2.1-2.3), species recovery and action plans (linked with Output 2.1) and the integrity of associated ecosystems. By Project end, each target PA will have a plan for sustained and consistent management (Component 2) and a plan for securing financing required to protect biodiversity;
iii. Design and initiate implementation of the above-mentioned plan in at least 1 PA, with implementation of at least 1 sustainable finance mechanism (as in Cabinet approved NPPASP) that is gender responsive which includes but is not limited

[37] Sector, A. 2007. Sustainable Finance Plan for St. Vincent and the Grenadines' Protected Areas System. Unpubl. Report submitted to the Gov't of St Vincent and the Grenadines. TNC/USAID. Kingstown, Jamaica.
[38] Cantin, E. 2017. Marine Protected Areas Sustainable Finance Needs Analysis Results: Antigua and Barbuda, Dominican Republic, St Lucia, St Vincent and the Grenadines.
[39] Ibid

to supporting access of socially excluded and vulnerable groups including rural women to livelihood initiatives. Engagement of the larger private sector in the development and implementation of sustainable finance mechanisms. Specific consideration should be paid to implementation of a comprehensive PA fee system and/or the design and implementation of a pilot Payment for Ecosystem Services program with Vinlec (St Vincent Electricity Company) and/or CWSA (Central Water and Sewerage Authority);

iv. Based on Output 1.5 (capacity needs assessment), support capacity needs through targeted training / activities of government, Trust Fund Board and key stakeholder. Ensure that the Trust Fund Board is able to identify and develop gender inclusive sustainable finance mechanisms and to meet its committed national contribution to the National Trust Fund to ensure a stable funding base for PAs. Participation of at least two board members in a regional sustainable financing workshop (tbd.) will be encouraged, as possible.

v. Implement a communication strategy (linked to Component 4) that incorporates PA financial sustainability mechanisms and promotion of PA goods and services that inspires confidence and a sense of transparency. This communication strategy will also incorporate sensitization and awareness raising of new and existing gender responsive financial mechanisms with an emphasis on the equal participation and benefits for all members of society.

Output 1.5. Strengthened institutional capacities for INRM (BD/SLM/CSA/Gender responsiveness) to support conservation of biodiversity and reduce land degradation.

42. Currently, the Project target PA intervention sites has low management capacity (average METT score for 3 PAs is only 36) due to limited financial resources, insufficient institutional capacity, lack of clearly defined long-term management goals, and planning with identified sustainable finances in place. The Project will build capacities within the various MARFFIL departments, including Forestry Services, Fisheries Division, SWCA, Extension Services, Physical Planning Unit, Coast Guard, and NPRBA, to improve exchange of information, implementation of activities and overall strengthened mainstreaming of biodiversity, SLM and integrated natural resources management into conservation planning. Trainings for capacity development will address systemic, institutional and individual capacities related to the Project outputs, including capacities to address legal, sustainable financing, and use of information for decision-making at the national / landscape level (Component 1); Linking site based PA and BD issues to support national and global environment benefits with socio-economic and livelihood needs of adjacent communities and resource users, ensuring incorporation of needs of women and vulnerable populations (Component 2), and site based land degradation in the islands' watersheds through the implementation of SLM measures, with a focus on climate smart agricultural practices to support livelihoods and biodiversity in the integrated landscape while, ensuring that gender equity and vulnerable populations needs are supported (Component 3). Capacity building activities will support management of the SESP identified risk (Risk 1) that there is a risk that limited institutional capacities might result in unintended impacts to BD conservation and SLM in the target landscape. Complementary capacity for private sector landowner, producer, agro-processor and community capacities will be addressed in Component 3. In all trainings consideration will be given to ensuring prioritization of women, also helping to ensure their equal access to Project benefits (SESP Risk 2).

43. Improved institutional capacity will be achieved through: (i) a targeted capacity needs assessment focusing on biodiversity, protected area management, land degradation, sustainable land management (including CSA) and integrated natural resources management. This assessment will build on past needs assessments, as appropriate, (ii) development of 5- and 10-year capacity development plans that identify short term priorities and long-term needs, beyond the scope of the Project for future national or donor financing; and (iii) training based on the needs assessment that will include formal trainings (workshops, trainings designed/developed to support project needs, technical short-term courses) as well as on-site training with technical experts supporting project implementation. Integration of trainings into SVG Community College (Kingstown), Dept. of Technical and Vocational Education will be explored for sustainability beyond the life of the Project. Targeted training identified during Project planning to be addressed during the capacity needs assessment include the following: land use planning certificate training, CSA and SLM techniques, biodiversity conservation and field assessment / inventory, plant collection, plant cataloguing / storage techniques; PA planning and management.

Component 2: Establishment and effective management of new and existing PAs.

Outcome 2.1 Operational terrestrial and marine protected area estate expanded with improved management, monitoring and strengthened protection, as measured by METT scores.

Outcome 2.2 Increased PA estate with globally vulnerable or irreplaceability values under protection.

Outcome 2.3 BD of known global significance in PA estate is documented, protected, with management and monitoring, including for newly discovered species of national and global significance, including at least 4 Species Recovery and Action Plans developed with implementation of 5 initiated.

46. This component will focus on expanding the PA estate in SVG (to 9,241 ha terrestrial and 2,183 ha marine), furthering the country's commitments to its 20/20 goals and meeting the draft NBSAP national targets, as outlined in the 5th Report to CBD. This component focuses on creating and gazetting a biological corridor that encompasses the central mountain range, the state lands above the 305 m contour, the habitat of a critically endangered species, and the country's largest marine park. This component also includes improved protection and management of known, and possibly unidentified, endemic and threatened species, with management plans, programmes established and initiated.

47. The project will focus site-based activities in the terrestrial environment on the proposed CFMR, on the Chatham Bay Wildlife Reserve, and on the marine environment at the proposed Leeward Coast Marine Park. All sites will be demarcated based on boundary surveys and this information will be used in the process of their legal establishment. Management plans will be developed, basic infrastructure and equipment, such as administrative offices, ranger posts put in place, and staff trained to carry out PA management functions. Inventories of flora and fauna (abundance / population size, distribution, range and habitats) within the site boundaries at these two sites will be carried out to address significant data gaps; these inventories will be further supported by the monitoring programs being developed. The assessment will inform development of the participatory gender responsive management plans, as well as 4 Species Recovery and Action Plans[40] for species of global significance. These will allow protected area managers to monitor changes in populations and habitat going forward and to adapt management strategies accordingly. Training and procurement of equipment for implementation of activities and site operationalization will also be supported.

Table 1. Detailed components of the Project support expansion of the PA Estate.

Site Name / KBAs (2018)	Terrestrial Area (ha)	Marine Area (ha)	IUCN Category	Status (2018)
Colonaire Forest Reserve[41]	1649		IV	Proposed
Dalaway Forest Reserve	708		IV	Proposed
Mt. Pleasant Forest Reserve	1173		IV	Proposed
Richmond Forest Reserve	2967		IV	Proposed
Kingstown Forest Reserve	800		IV	Proposed
Cumberland Forest Reserve	961		IV	Designated
La Soufriere National Park	4956		II	Proposed
Central Mountain Forest Reserve	**13,214**		**IV**	
CFMR Contribution to the PA Estate	**9,178[3]**			**Proposed (GEF-6)**
Leeward Coast Marine Park		**2183**	**IV**	**Proposed (GEF-6)**
Chatham Bay	**63**		**IV**	**Proposed (GEF-6)**
Total Contribution to the PA Estate	**9,241**	**2183**		**GEF-6**

[1] The Parrot Reserve (3075 ha) is legally designated and overlaps with the proposed Colonaire, Dalaway and Mt Pleasant Forest Reserves in the proposed CMFR

[2] Central Mountain Forest Reserve will be a consolidation of all the 7 sites / KBAs into 13,214 ha contiguous site.

[3] 9,178 ha is CMRF (13,214 ha) excluding the already designated Parrot Reserve (3,075 ha) and Cumberland Forest Reserve (961 ha)

Output 2.1 Central Mountain Range Forest Reserve expanded, legally gazetted, demarcated and operationalized

[40] *Amazona guildingii*; *Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi*

[41] Gazetted 3,075 ha Parrot Wildlife Reserve (overlapping with Colonarie, Dalaway and Mt Pleasant) + 961 ha Cumberland Forest Reserve = 4,036 ha gazetted within the 13,214 ha within the proposed CMFR

48. The proposed Central Mountain Forest Reserve (CMFR) will consolidate and encompass 7 KBAs into one forest reserve[42] (5 proposed and 1 designated FR, 1 proposed National Park, all KBAs). See Table 1, above, for further detail. This activity will support the expansion of the terrestrial PA estate, forming a contiguous biological corridor of 13,214 ha (KBA Corridor), and supporting ecosystem and community resilience to the potential impacts of climate change (SESP Risk 7). The project will support the CMFR's formal gazetting (including completion of the site survey, georeferenced boundary and preparation of necessary documents for Cabinet submission). As part of this process, boundary demarcation, baseline data to inform the development of a gender responsive participatory and evidenced-based management plan, conservation related activities for species of national, regional and/or global significance, addressing threats (with a focus on IAS) to key species and habitats will be undertaken. PA System and site based sustainable financing plans and their implementation will incorporate sustainable financing for implementation of site management plans and species recovery and action plans (including addressing threats such as IAS). Operationalization will be supported through demarcation, management / zoning, identified and targeted conservation action, training and provision of equipment, as outlined in each of the sub-outputs below.

49. *Output 2.1.1 Site boundary delineation, demarcation and support for legal establishment***.** The project will support completion of the survey of the 305 m contour line (including revising / confirming areas for 305 m boundary extension (i.e. Mamoon / Montreal catchment areas), based on high-resolution satellite imagery to complement the dated and incomplete 1990 cadastral survey that will be verified with ground-truthing and adjusted to include crown owned and abandoned agricultural lands. Drone technology will support areas identified for boundary delineation in more inaccessible areas (linked with Output 1.1.2). Forestry Services staff will carry out the activities with Project TA, as well as the Project's procurement of drone technology/GIS and field equipment. The completed surveyed boundary will be incorporated into centralized database (component 1), and demarcated. Demarcation of the CMFR boundary line will likely incorporate a mix of methods depending on the location and accessibility. Currently, crown land at the 305 ft contour is demarcated with a clearing in all accessible areas. As a regular Forestry Services activity, this boundary clearing will be maintained but expanded as needed to newly identified areas to be included in the site. Native species can be considered for use as boundary markers, as appropriate. Permanent demarcation points will be georeferenced, registered and incorporated into the CIMS. Forestry Services staff will carry out the activities with Project support for equipment and temporary field staff. The Project will further support the preparation of documentation to Cabinet for approval of gazetting and any required preparation of technical/ecological justification for establishment of the CMFR. The Project will include any technical assistance with legal documentation, preparation of maps through Project supported GIS equipment and satellite imagery (linked with Output 1.1.2).

50. *Output 2.1.2 Terrestrial Biodiversity / Ecological Inventory and Assessment, Monitoring and Conservation*. The assessment and BD inventory will develop and direct priority conservation and monitoring programs for CMFR and its immediate surroundings. Activities will include: (i) Establishing a baseline of ecological conditions and species inventories for flora and fauna from which to establish baseline conditions, assess and monitor threats, and manage biodiversity and ecosystem services within the CMFR and its buffer zone. The biodiversity assessment will extend throughout the CMFR to inform overall planning of the PA, connectivity needs and priority sites for management intervention. This BD/Ecological Assessment will also extend into the Buccament Watershed to inform overall integrated natural resource management planning. It will include the identification of key sites of BD of global significance, improved suitability mapping for hive locations (linked with sub-output 3.3.3) and invasive species for which control measures should be implemented; (ii) Develop and initiate conservation and management program for key biodiversity of national and global significance (known and identified through the assessment), including for endangered species and key ecosystem services, such as threats to water flow and recharge in threatened watersheds; (iii) Link outputs of terrestrial biodiversity and assessment, as well as the terrestrial habitat maps and monitoring programmes to the CIMS; (iv) Initiate management and control programs and support existing IAS programs, with focus on threats to BD of global significance and ecosystem services; (v) Train existing staff to carry out assessments and monitoring (supported by capacity building activities in Component 1.5). Forestry Services staff will implement these activities with technical assistance from the Project in the form of activity specific support training and on-site training. The activities will be further supported through the Project's procurement and use of drone technology, satellite images, GIS and field / office equipment for the Forestry Services' GIS Unit).

51. Biodiversity / ecological assessment and inventory will include (but not be limited) to the following;

- Inventories/assessment of fauna and flora (vegetation, birds, invertebrates (incl. butterflies), herpetofauna of the Central Mountain Range Forest Reserve's terrestrial ecosystems and adjacent watershed agricultural landscapes;

[42] Central Mountain Range Conservation Corridor (KBA Corridor)

- Status and location of threatened / endemic species (with monitoring programs developed and initiated as part of the Species Recovery and Action Plans, Output 2.1.4);
- ID of threats (climate change impacts on biodiversity and ecosystem functioning, invasive species, hunting, land uses, etc.) and develop/prioritize monitoring plan. Key invasive assessed (distribution, studies) with control and management plan developed and initiated (mongoose, rats, elephant grass, other).
- Baseline forest ecosystem studies to monitor climate change effects (structure composition, with permanent plots and monitoring protocols);
- Forest cover / land use (incorporating satellite imagery interpretation and ground truthing).

52. *Output 2.1.3 Develop evidence-based gender responsive management plan, with implementation initiated.* The project will support the Forestry Services in the development of a management plan for the overall CMFR. The management plan will be based on broad stakeholder consultation and collaboration (government, CBOs, NGOs, communities, men & women resource users, private sector, others) and ensure strong emphasis on developing sustainability strategies such as co-financing and private sector engagement. A multi-sectoral management committee with at least 40% representation will be established to support its implementation (initiated during Project implementation period), and consider within them aspects related to the presence and active participation of women and men in the management and access to benefits of the PA. The management plan will identify the CMFR overall goals, objectives and management guidelines, integrating related Project outputs, including: i) biodiversity assessment (including conservation needs and actions of species of global significance, IAS and others); ii) sex disaggregated socio-economic / livelihood survey of communities neighboring the site and other resource users (to define livelihood opportunities, gender specific needs and current use/ management of the natural resources), as part of the socio-economic / livelihood survey and analysis in Output 1.2 (addressing SESP Risk 2); (iii) ecotourism development, through private sector engagement; and iv) forest cover mapping from classification of satellite images for forest cover and iv) monitoring programmes (soil conservation, satellite image interpretation and classification), all outputs of the tools developed (output 1.1.2) to support decision-making. The CFMR PA management plan will be used as the key guiding document to support site management for species and biodiversity conservation, climate-resilient ecosystem management, and gender responsive resource use / management. Current international best management guidelines should be adopted, such as those of IUCN[43].

53. Implementation of the long-term management and conservation strategy will take into consideration financial sustainability (linked to Output 1.4). A site-specific business and implementation plan will be developed to support long term sustainable financial planning and management, developed in tandem with the management plan. The Project will work with to develop partnerships with existing and potential private and non-governmental partners for the gender inclusive management and sustainable financing of the site (i.e. tour operators, concessionaires, NGOs, and other donors and stakeholder).

54. The Project will also undertake a community-based education and outreach program (linked to Component 4) to provide capacity building activities to enable effective participation of women and men in management planning, to raise the awareness of the socioeconomic benefits generated by the PAs (e.g., ecosystem services such as water provision and soil retention, as well as potential tourism revenues, including benefits to women), and partner with Network of Rural Women Producers and the Caribbean Youth Environment Network (to be confirmed) to archive and distribute traditional knowledge regarding CMFR resources, traditional current and historic uses (through video and other means, also linked with Output 4.1).

55. *Output 2.1.4 Species Recovery and Action Plans integrated with invasive species management programs***.** The Project will support the Forestry Services in addressing essential data gaps in the identification and implementation of key species management activities to ensure these species' persistence. These activities will include support for key research identified to inform species and habitat management activities, development of Recovery and Action Plans for the 4 Globally threatened species: St Vincent Parrot *Amazona guildingii*; *Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi*[27], and any other potentially globally significant species (based on outputs of the biodiversity assessment). Support will also be provided to initiate implementation of the above-mentioned plans in coordination with local stakeholders, including collaboration with research institutes / educational institutions, as appropriate. Species Recovery and Action Plans integrated with invasive species management programs will ensure a integration of a strong emphasis on developing sustainability strategies such as co-financing and private sector engagement.

[43] https://www.cbd.int/doc/pa/tools/Outline%20for%20Protected%20Areas%20Management%20Planning.pdf

56. The IUCN Red-listed EN[44] endemic frog *Pristimantis shrevei* is documented in the CMFR. It is St Vincent's only endemic frog (one of 4 frog species) has exhibited continuing decline. It is habitat-restricted to the highest elevations (275-922 m elevation) and appears vulnerable to environmental perturbations, including the presence of the introduced frog *Eleutherodactylus johnstonei*[45] *and the Chyrtrid fungus* (presence confirmed on St Vincent in 2015[46]). *Chironius vincenti*, the St Vincent Blacksnake, is a CR single island endemic known only in the Cumberland Forest Reserve, in habitat also inhabited[47] by the St Vincent Parrot *Amazona guildingii*. The first *C. vincenti* specimen was collected by the Forestry Services in 1987, and only most recently documented in 2005 due to its extreme rarity, even in areas of apparently good rainforest habitat. Causes of its decline are unknown though may be due to historic and ongoing pressures, and targeted research is recommended to collect both current data and identify threats / causes to its rarity.[48] The decline of *Amazona guildingii,* St Vincent's VU single island endemic parrot and National Bird, has been halted to due habitat conservation, law enforcement (legal protection) and public awareness campaigns, though its population remains small and its range limited. Numbers increased from 370-470 individuals in 1982 to approximately 519 in 2002, and then to c.734 in 2004, but no census has been conducted since. Along with extreme climatic events, loss of nesting trees is exacerbated by the introduction of the nine-banded armadillo *Dasypus novemcinctus,* whose digging topples trees and reduces the number of suitable nest trees[49].

57. The Forestry Service has capacity to implement a full species census for *Amazona guildingii* though none have been carried out since 2004, as resources and equipment to do so are lacking. Current data on abundance and distribution is essential, as is the need to identify key threats and activities to address and reduce the threats. Specific focus for research would be on movements and fruiting, and fruiting phenology of the food source, based on Forestry Service reports of the species increasing departure from the CMFR to feed on agricultural fruit crops in lower elevation. The EN endemic Whistling Warbler *Catharopeza bishopi* is found primarily in the upper elevations (elevations of 300-1,100 m, but mostly below 600 m) of the Colonaire and Perseverance watersheds and on Richmond Peak, within the proposed CFMR. It is found primarily in primary, elfin and palm brake forests whose 80 km^2 support an estimated 1,500–2,500 territorial males in 1988. Habitat loss from illegal human activities and the La Soufriere volcano eruptions 1902 and 1979 resulted in extensive habitat loss and the warbler was extirpated from the northern mountain region. With no population estimates since 1988[50], a new species census is needed. Particular attention needs to be paid to the potential confusion and similarity between the calls of the *C. bishopi* and the Brown Trembler *Cinclocerthia ruficauda,* which could significantly impact census results and overall population estimates.

58. As part of the species management activities and the development of 4 Recovery and Action Plans, the project will also support the development and implementation of IAS control / management programmes at key sites (tbd based on outputs of studies. The impacts of IAS on biodiversity are well documented[51,52] as is their accounting for extensive bird extinction[53,54,55,56,57]. The

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[44] Blair Hedges, Robert Powell. 2004. *Pristimantis shrevei*. The IUCN Red List of Threatened Species 2004: e.T56961A11561177. http://dx.doi.org/10.2305/IUCN.UK.2004.RLTS.T56961A11561177.en. Downloaded on **16 June 2018**.

[45] Rodríguez Gómez CA, Díaz-Lameiro AM, Berg CS, Henderson RW, Powell R. 2017. Relative abundance and habitat use by the frogs *Pristimantis shrevei* (Strabomantidae) and *Eleutherodactylus johnstonei* (Eleutherodactylidae) on St. Vincent. Caribbean Herpetology 58:1–12.

[46] Sweeney R (2016) First detection of the amphibian chytrid fungus (*Batrachochytrium dendrobatidis*) in St. Vincent and the Grenadines. Herpetological Review, 47, 212–214.

[47] *The St. Vincent (Lesser Antilles) herpetofauna: Conservation concern*. Available from: https://www.researchgate.net/publication/233616831_The_St_Vincent_Lesser_Antilles_herpetofauna_Conservation_concern [accessed Jun 16 2018].

[48] Daltry, J.C., Henderson, R.W. & Powell, R. 2016. *Chironius vincenti* (errata version published in 2017). The IUCN Red List of Threatened Species 2016: e.T4672A115069815. http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T4672A71739530.en. Downloaded on 16 June 2018.

[49] Culzac-Wilson, L. (2005) *Species conservation plan for the St Vincent Parrot* Amazona guildingii. Puerto de la Cruz, Tenerife: Loro Parque Fundación.

[50] Carr, M., Foster, J., Gittings, T. and Morris, R. 1988. Distribution and abundance of St Vincent's Whistling Warbler and other endemics. Norwich, UK: University of East Anglia (Unpublished expedition report).

[51] Atkinson, I.A.E. 1985. The spread of commensal species of Rattus to oceanic islands and their effects on island avifaunas. Pages 35-81 in Moors, P.J. (Ed.). *Conservation of Island Birds*. ICBP Technical Publications 3.

[52] Blackburn TM, Cassey P, Duncan RP, Evans KL, Gaston KJ. 2004. Avian extinction and mammalian introductions on oceanic islands. Science 305: 1955–1958.

[53] Daltry J.C. 2006. The effect of black rat *Rattus rattus* control on the population of the Antiguan racer snake *Alsophis antiguae* on Great Bird Island, Antigua. *Conservation Evidence* 3: 30-32.

[54] Francis, D.; Ramnanan, N. (Eds.). 2012. *Stop the Invasion of Alien Species.* Technical Publication Report: Mitigating the Threats of Invasive Alien Species in the Insular Caribbean. CABI Caribbean and Latin America

[55] Jones, H.P.; Tershy, B.R.; Zavaleta, E.S.; Croll, D.A.; Keitt, B.S.; Finkelstein, M.E.; Howald, G.R. 2008. Review of the global severity of the effects of invasive rats on seabirds. Conservation Biology 22: 16-26.

[56] *Hoagland, D.B.; Horst, G.R.; Kilpatrick, C.W. 1989. The mongoose in the West Indies: biogeography and population ecology of an introduced species. Pages 409-422 in Woods, C.A.; Sergile, F.E. (Eds.). Biogeography of the West Indies: Patterns and Perspectives. CRC Press.*

[57] Atkinson 1985

Small Indian mongoose *Herpestes auropunctatus* has been documented at high elevations within the proposed CFMR, as has the Black rat (*Rattus rattus).* The project will support the identification of IAS threats to the species of global significance and will develop and initiate the implementation of, at minimum, two (2) 5 or 10-year control and management plans, anticipated for *Herpestes auropunctatus* and *Rattus rattus*. Other key threats (such as from the introduced *Dasypus novemcinctus*) will be assessed, with specific methods to address the threats developed, supported with IAS technical expertise (such as Island Endemics, Island Conservation), focusing on critical habitat and breeding sites. Species to control will be prioritized based on threat level and species impacted. The program "Preventing COSTS of Invasive Alien Species in Barbados and the OECS Countries" focuses on prevention, early detection, and control of IAS with a risk management approach. Though the COSTS Project has no SVG National component beyond the regional institutional strengthening, it will engage OECS countries to apply prevention and control with lessons learned.

59. *Output 2.1.5 Operationalization of the Central Mountain Forest Reserve.* Additional site operationalization will include office support (equipment, supplies) for existing Forestry Services office at Camden Park, from which all terrestrial PA management and operations will be based, and which will also house the GEF-6 Project Team. Existing forestry staff will be responsible for site-based activities, including monitoring and enforcement of boundaries, which will be integrated into existing work programmes. The Project will support temporary contract workers for the field site boundary delineation and demarcation. In some cases, local residents will be contracted to provide labor for these and other activities, ensuring gender equity. Technical experts will lead the efforts to design and implement the biodiversity and ecological inventories, bird surveys, and any focused species studies (see component 1.1.2 for details of these activities). These technical experts will also be responsible for providing relevant on-site training for Forestry Services, site staff and any local residents. Resources needs (equipment, materials, office needs, staff) will be assessed and Project supported for effective PA management, both at the National level (Forestry Services, National Parks, Rivers and Beaches Authority) and at the site level to support monitoring and visitor management.

Output 2.2 Leeward Coast Marine Park legally established, with conservation zones demarcated operationalization initiated[58].

61. Project will focus site-based activities in the marine environment on the 2183 ha proposed LCMP. The Project will support the Fisheries Division and National Parks, Rivers and Beaches Authority in delineating the site boundaries of the entire LCMP (using satellite imagery, Output 1.1). The Project will also provide technical support for the gazetting process, as needed, for the preparation of documentation for Cabinet submission. As this leeward coast of SVG is heavily used for fishing and associated livelihoods, management planning would necessitate integration of fisheries management planning, which is outside the scope of this Project. As such, this Project will only focus on defining and operationalizing conservation zones within the overall site. A baseline biodiversity / ecological assessment of the proposed LCMP will be carried out along with monitoring programmes established (supporting Output 1.1.2), which will be used to inform delineation of the conservation zones supported information collected under output 1.1 (socio-economic / livelihood survey). The Project will support integration of the site's boundaries into navigation charts to communicate the PA and conservation zones presence and location. The identification of and consensus building in the planning and approval of these zones will facilitate future development of, and integration of these conservation zones into, an overall site management plan for the entire LCMP (beyond the scope of this Project).

62. The focus of this output is to take inventory and map the existing resources, develop an effective monitoring programme and propose a marine conservation zones design for the LCMP. To do this effectively, a collaborative approach amongst the relevant sectors, government agencies, marine resource users and the general public is required. This approach will not only to educate relevant stakeholders of the importance of managing marine resources sustainably, but also gather comprehensive ecosystem-based information in order to develop an equitable and acceptable marine zoning design for conservation areas.

63. <u>*Output 2.2.1*</u> *Establishment of Multi-Stakeholder Committee*. The project will support establishment of a multi-stakeholder committee, working with current management and governance structures for other sites in SVG (Tobago Keys Marine Park, South Coast Marine Protected Area) to support the identification of the conservation zones. The SVG NPPASP (2010-2014) supports collaboration in site management, indicating that "wherever possible the day-to-day operations of national parks and protected

[58] Due to the extensive and complicated issues in SVG related to fisheries along the leeward coast, the development of a management plan for the proposed site would be outside the scope of this Project and would also add a large and previously unidentified risk. Furthermore, as per STAF comment, it was recommended that the Project consider reducing its activities. Therefore, the Project will focus on the identification of conservation zones within the site, as requested by the site's responsible agencies, Fisheries Division and the National Parks, Rivers and Beaches Authority

areas will be delegated to a responsible agency that can include NGOs/CBOs and private sector with a board community stakeholder representation [59] ." Pilot collaboration arrangements will be explored and initiated with communities, fisher organizations, women traders and sellers, NGOs, CSOs and the private sector. These will be supported by MOUs for day-to-day site management of the conservation zones (Output 2.2.3) based on clear policies and legal standing governing PA co-managers for the management and financing of PAs, clear roles, responsibilities, and capacity development needs of all co-managers, including men and women, and other institutional arrangements that may facilitate community participation in conservation zone activities. All arrangements will be finalized and approved by the Fisheries Division and NPRBA.

64. *Output 2.2.2 Marine baseline biodiversity / ecological assessment and monitoring programs*:

(i) The assessment and monitoring programs activities will include support for a baseline biodiversity and ecological assessment, including the condition of reefs and reef species (species of global, regional or national significance), as well as the state or trends in coral reef ecosystem health. A Consultant Team will be hired to collect baseline data on biodiversity in the near shore environment (<30m) of the proposed LCMP. This will include the presence of IUCN Red-listed species, coral reefs, fish, turtles, seagrass beds, mangroves, and other key organisms and biological parameters. Existing available spatial and non-spatial data will be used to inform data collection, including locations of resources and baseline status of species, as appropriate. This biodiversity / ecological assessment will be supported by baseline bathometric studies, carried out through the Commonwealth Marine Economies Programme (2016/2017) that produced hydrographic surveys, bathymetric lidar (completed January 2017) in areas less than 40m. Through this study, the Centre for Environment Fisheries and Aquaculture Science (CEFAS) and the National Oceanography Centre (NOC) mapped the habitats found on the seabed around St Vincent as well as health of coral reefs and seagrass beds. The marine BD assessment will use the habitat maps produced by the CME Programme for ground truthing along with marine biodiversity and ecological assessment to develop the comprehensive baseline. This baseline will be used to identify those sites of BD significance. It will also be used by the Fisheries Division and NPRBA to support future LCMP fisheries and management planning beyond the conservation zones, and beyond the scope of the Project. Equipment and supplies needed to achieve these activities outputs will be supported by the Project.

(ii) Along with the assessment, a monitoring program to track the extent and health of coral reef ecosystems and biodiversity will be developed and implemented. It is expected that this program will follow AGGRA Coral reef health indicators that examines multiple indicators of the benthic-coral-fish relationships and build on existing AGGRA data for SVG. The indicators for the LCMP will be monitored for the purposes of this Project, and long-term monitoring plots will be established. Training (diving and AGRRA certification) for additional 6 staff of Fisheries Division / National Parks, Rivers and Beaches Authority will build capacity and sustainability for government's ongoing monitoring capacities. The most recent AGGRA Coral Reef Health Index and Report Card was in 2016[60] through a joint TNC/GIZ funded ECMMAN project (2013-2017). It provided 4 staff from the Fisheries Division with training in diving and monitoring techniques, including in the establishment of a long-term monitoring program. The Strategic Results Framework outlines the Project indicators to be monitored, aligned with AGRRA indicators of coral reef health and United States Coral Reef Task Force Watershed Partnership Initiative[61]: All baseline and monitoring data will be input into the CIMS, with specific technical support of data recording / entry provided. (iii) Habitat maps will be developed based on these outputs, used to inform conservation planning (linked with Output 2.2).

(iii) Developing and initiating implementation of an invasive species management and control program. Currently, Indo-Pacific Lionfish *Pterois volitans* control occurs on an *ad hoc* basis primarily through the activities of a private sector dive operator (Serenity Dive) who maintains monthly records of catches. Existing data will be used, as appropriate, as baseline data to support data collection and monitoring efforts. A 5-year Lionfish control program for the marine park will be developed, with private-sector partnerships explored for its implementation. Community outreach and school programmes to increase awareness of Lionfish as a food resource and its detriment will be implemented, with integration into the existing Reef Guardian Programme explored, as will engaging a local NGO SCIENCE for community outreach and education[62].

[59] Saint Vincent and the Grenadines National Parks, Rivers and Beaches Authority 2009. National Parks and Protected Areas System Plan 2009-2014. 52 pp.

[60] Kramer PR, Roth LM, Constantine S, Knowles J, Cross L, Steneck R, Newman SP, Williams SM, Phillips M. 2016. St. Vincent and the Grenadines' Coral Reef Report Card 2016. The Nature Conservancy. (www.CaribNode.org).

[61] S. Holst Rice, P. Bradley, H. Slay, W. Wiltse, D. Polhemus, C. Storlazzi, T. Montgomery, P. Sturm, R. Viqueira, T. Callender, M. Curtis, and J. Dean. 2016. United States Coral Reef Task Force Watershed Partnership Initiative: Priority Ecosystem Indicators. Washington, DC. 56pp.

[62] Training of chef's in restaurants could be explored to increase demand for lionfish.

(iv) Turtle beach monitoring activities will be developed and supported along the leeward coast, as part of the SVG Sea Turtle Conservation Program (SVGSTCP) implemented by the Fisheries Division in collaboration with National Parks, Rivers and Beaches Authority through a grant from SVG Preservation Fund (SVGPF). New Fisheries legislation (2017 Amendment) prohibits killing of all sea turtles and egg harvesting, however, awareness, outreach and monitoring/enforcement is needed to support sea turtle conservation and reduce threats (i.e. plastics). SVG Sea Turtle Conservation Program needs will be identified for implementation support, such as conservation trainings (practical field and classroom) for Program and agency staff, coastal communities, and primary school programme.

65. *Output 2.2.3 LCMP boundary delineation, gazetting and use practices within the conservation zone created.* The project will support the proposed LCMP boundary delineation, using satellite images procured through this project (Output 1.1) and ground-truthing. Based on consultations with key implementing institutions and stakeholders during the PPG phase, demarcation (buoys) will only target the conservation zones. While demarcation of the outer boundaries of the Marine Park would contribute to the overall site's protection, available resources would not permit sufficient outer boundary demarcation (due to the site's size) as well as demarcation of the conservation zones. As the conservation zones were deemed to be the priority for strengthening protection and management of key biodiversity of global significance, the Project will focus on them. Further, through the OECS/WB Agricultural Competitiveness Project, US$380,000 will be invested in buoy Installation around St Vincent, for which Fisheries Division and NPRBA have identified the LCMP for buoy installation.

66. A marine biologist and a marine engineer will be contracted to engage stakeholders in a participatory process to confirm zoning boundaries and develop participatory zoning guidelines and identify the site's spatial layout (including demarcation points with the marine engineer to install the buoys). Based on extensive stakeholder consultation, inputs of a multi-stakeholder committee and the outputs of the Marine baseline biodiversity / ecological assessment, the Project will support the identification of conservation / no take zones within the LCMP. These conservation zones, supported by biodiversity / ecological data that identifies clusters and areas of key biodiversity and accompanied by habitat maps, will be agreed-on through broad community and stakeholder participatory planning and consensus building process, that captures gender specificity of resource access and use (supporting management of SESP Risk 2) , and that takes into account outputs of the socio-economic / livelihood survey (Output 1.1).

67. Based on the outputs of the baseline biodiversity / ecological assessment, priority conservation zones for demarcation will be identified, with broad stakeholder input and operationalization of the conservation zone initiated. The Multi-stakeholder Committee will work with the marine biologist to define use practices for conservation zones, such as defining appropriate recreation activities (i.e. mooring buoys for small boats, such as dive boats) and what type of boats can pass through site to avoid pollution. Furthermore, this Committee will see how opportunities can benefit men and women in communities, and site-appropriate economic opportunities for communities, fishers and women traders & sellers in the conservation zones will be assessed and addressed. These will be defined as part of the development of Leeward Coast conservation zone guidelines (for identified conservation zones within the LCMP) which will integrate agreed-to uses (diving, recreation), enforcement, monitoring (drone supported, in collaboration with Forestry Services) and conservation action within these areas.

68. *Output 2.2.4 Operationalization of conservation zones within the Leeward Coast Marine Park***.** A sex disaggregated baseline socio-economic / livelihood assessment, linked with Output 1.1.2, will also provide baseline data on livelihoods within and surrounding the LCMP to inform zone planning, and the sex disaggregated baseline Knowledge, Attitude, Perception and Belief (KAPB) study will also inform outreach and communications messages and strategies (linked with Component 4). This activity will also follow the methods used in the development of the South Coast MPA (CATs programme), building on lessons learned for marine zoning in a multi-use environment.

69. The operationalization of the conservation zones will be under responsibility of Fisheries Division and the NPRBA, in collaboration with the SVG National Coast Guard that will provide enforcement (such as in the South Coast MPA). The Project will further support the identification of sustainable finance mechanisms and initiate implementation of a pilot income generation initiative in the LCMP conservation zones, to be agreed to through stakeholder consultations, ensuring benefits to women. Economic opportunities will be explored that are aligned with the conservation zone use guidelines developed that support biodiversity conservation. These opportunities can include mooring buoys for dive boats, establishment of a diver fee system (i.e. diver tags, dive shop level fee payment system), or engaging the to implement a voluntary opt-out fee that would go toward PA management, similar to a successful programme implemented in St Lucia. Another opportunity can include a simple licensing

system for private tourism operators offering activities such as diving, boat tours, mooring to ensure transparency and simple procedures for visitors, the charging / collection of fees and other payments would be harmonized with other MPAs in the country (and with neighboring countries in the region offering similar services). This would involve clear rules for determining the distribution of income between the service provider (individual / guide, association or concession), the PA and the PA system to promote equitable sharing of benefits among parties involved, while contributing to the preservation of the natural heritage. Support will be provided to assess, estimate and develop a user fee and identify other potential revenues should be based in part of similar systems already in place in other countries in the region such as St Lucia, Antigua and Barbuda and the Dominican Republic. The mechanism will be based on the Cabinet approved sustainable finance mechanisms identified in the NPPASP and will build on and collaborate with the GEF Climate Change 4 Fish Project which supports community-based fish sanctuaries by providing resources, training and alternative livelihood opportunities for men and women.

70. Further conservation zone operationalization will include outfitting of the NPRBA building in Cumberland Bay to serve as the marine park office. This will include office equipment (computers, printer, projector, desk/chairs, etc.) and key maritime field equipment for safety, such as radios, base receivers, first aid, emergency protocols, monitoring (dive equipment, cameras-underwater/GoPro, field laptops/Toughbook, other). AGGRA monitoring training and other technical expertise will be provided. Training for Fisheries Division staff will include topics and on-site activities to strengthen effective management of the site, with capacity gaps incorporated into training needs assessment and capacity development plan (output 1.5), include diving and monitoring, as outlined in the marine BD assessment (Outputs 1.1.2). Outreach and education will take place for communities, resource users and other stakeholders to help ensure effective participation in consultations, site planning and activities by both men and women.

Output 2.3 Chatham Bay Wildlife Reserve is legally gazetted, demarcated and operationalized. This activity aims to further expand the PA estate and protect the sole known habitat of Critically Endangered single island endemic *Gonatodes daudini*[63].

71. *Output 2.3.1 Species census (distribution and abundance) to determine habitat for protection*. The Union Island Gecko *Gonatodes daudini* is an IUCN listed CR single island endemic, considered at an extremely high risk of extinction in the wild. To date it has been found only within an area of deciduous forest above Chatham Bay, a range of approximately 63 ha. Rapid decline due to the illegal trade, habitat loss and the impacts of invasive species are all likely greatly contributing to its decline. Successfully preventing the extinction of the Union Island Gecko and conserving its habitat would make a significant contribution to SVG's commitments to CBD and St George's Declaration of Principles for Environmental Sustainability in the Organisation of Eastern Caribbean States.

72. A baseline comprehensive census will be carried out to identify abundance and distribution, its output used to inform habitat and area to be proposed for legal protection and management. Due to the likely rapid decline in species abundance from illegal trade and export, both current habitat and previously identified known habitat (that may currently be uninhabited but is potential habitat) will all be identified as species habitat and included for site protection and management. Dry forest ecological studies and species movement patterns should be carried out to further support habitat use (area for inclusion in the area identified for legal designation) as well as the identification of unique site biodiversity. Though all existing and potential habitat will be identified and proposed for conservation, much of the proposed Chatham Bay Wildlife Reserve is surrounded by private lands that is in demand for development. Nonetheless, and additional buffer zone for legal protection will be explored.

73. Habitat identification and species census to identify distribution and abundance are two of the priority elements identified for the implementation in Union Island Gecko Conservation Action Plan (2016-2021)[64]: This Conservation Action Plan process was initiated in 2015 by staff from the Forestry Services, Fauna & Flora International and Virginia Zoo and was supported by a 2016 grant to Fauna & Flora International from the SVG Preservation Fund (SVGPF). This Conservation Action Plan has been adopted at Ministry level and is part of FD wildlife management programme, and implementation support is provided by the Union Island Environmental Attackers (local CSO). The total estimated cost of implementing the plan 2016-2021 is USD 804,500-1,223,400, of which USD 230,000 are dedicated to high priority activities. With the support of experts, research on basic life history, habitat suitability and other key research identified in the Conservation Action Plan will be prioritized (based on available funds) and carried

[63] Daltry, J.C., Adams, R., Gaymes, G., Providence, F. & Sweeney, R. (2016) *Union Island Gecko: Conservation Action Plan, 2016–2021.* Report to the Saint Vincent & the Grenadines Forestry Department, Fauna & Flora International and Virginia Zoo. 57 pp.

[64] Ibid

out. Additional / current threats to species and its habitat will also be identified and will be addressed, as appropriate. Particular focus will be paid to identifying key invasive mammalian predators, developing a 5-year control programs and initiating its implementation.

74. *Output 2.3.2 Site surveyed, demarcated with signage and a management plan developed***.** Based on the outputs of the research above, and through consultation with Forestry Services and stakeholders, the site for proposed legal protection will be identified and mapped, surveyed, demarcated (including with signage) and the documentation for Cabinet submission for its legal gazette supported. Management planning will be implemented using existing information and structures, including those outlined in the conservation plan, and as identified for site operationalization and supporting and enhancing existing co-management arrangement with Union Island Environmental Attackers (UIEA), a local NGO currently responsible for site management, overseen by Forestry Services.

75. *Output 2.3.3 Site management operationalized, including enhanced enforcement.* Site operationalization will be overseen by the Forestry Services with site management implemented through existing and Project supported / strengthened co-management arrangements with UIEA. The Project will continue to support this co-management arrangement with direct financing to UIEA, ensuring that detailed co-management arrangements with the Forestry Services are in place. These will include detailed roles, rules and responsibilities documented with legal support provided. With no permanent on-island Forestry Services personnel, this well-established NGO provides and maintains an ongoing strong presence, site management and community relations to ensure continued effective site management.

76. Site protection is critical to the species immediate survival, and site enforcement is a key element identified in the Acton Plan. While visitor use along a maintained trail is supported in the action plan, enforcement is essential to reduce risks of poaching and habitat destruction (i.e. felling of trees, fires). Enforcement will be further supported by the development and enactment of CITES legislation and Appendix 1 listing (see Output 1.3). Through funding from the Saint Vincent and the Grenadines Preservation Fund (SVGPF), the UIEA, in co-management arrangement with the Forestry Services, employs 2 full time guards since 2017 (weekdays/daytime), provides uniforms, basic equipment and radios for safety / communication. However, this one-time funding will run out in March 2019. The guards work under the mandate of Wildlife Conservation Act and Forest Resource Conservation Act and have had 1 successful conviction for illegal collection / poaching. Working in pairs for safety, there is insufficient funding to support nighttime / weekend presence, though poachers have been documented entering the site at night. The Project will support the UIEA, which will include support to hire 6 full time guards for the Project duration and provide training and essential equipment (including radios with a base station to ensure communication, GPS, uniforms, transportation) needed for full time site presence and enforcement. Women guards will be encouraged. UIEA will aim to leverage and mobilize the intended resources to be able to continue to employ the 6 guards after the end of Project support.

77. Site operations will be further supported and strengthened by training for the UIEA and its field staff (field techniques, enforcement, endangered species conservation, other) and office and field equipment (office: such as computer, printer, projector, cameras, and other basic office upgrade needs; field: radios/base station, ATV/Golf cart for enforcement transport to site/safety ease of access, uniforms/field supplies, other), and supplies (brochures printed materials, environmental outreach materials, site interpretation/signage, site and species management). Research materials and related equipment to support technical consultancies will be implemented through Forestry Services with on-site support by the Wildlife Conservation Officer and field staff but managed on site by UIEA. Gender responsive outreach, communication and community engagement activities will be project supported and implemented by the UIEA, further supporting an existing collaboration with Youth Empowerment Services.

78. **Output 2.3.4 Sustainable finance mechanism implemented by NGO to support long-term co-management arrangement of Chatham Bay / Union Island Gecko conservation.** The Project will support sustainable finance initiatives to be implemented by UIEA and that will strengthen Chatham Bay Forest Reserve management effectiveness and continue post-project completion (i.e. enforcement, outreach, equipment maintenance). This will be further developed during Project inception and will include clear criteria on management of the mechanism, who/how the resources will be used once the mechanism is functional and will ensure transparency. This support will provide increased financial independence of the UIEA to continue strengthened co-management of the Chatham Bay protected area (in co-management arrangements with the Forestry Services) after GEF financed Project interventions. Furthermore, with the implementation support of the UIEA, the Project will provide training and tools for women local artisans and small enterprises to develop livelihoods that promote the gecko. The Project will work with the UIEA to develop financial arrangements with local artisans and resource users (i.e. guides and tourists) to ensure appropriate training for resource

user meets conservation goals and objectives, and that portions of the revenue from these activities support UIEA and their implementation of site management activities for Gecko conservation. This will be supported with extensive and gender inclusive stakeholder consultation and Project support for development of legal agreements for both co-management arrangements with the Forestry Services as well as for revenue generation and retention to support on-site management.

Component 3. Integrated watershed management measures in R2R setting to reduce threats to upstream PA and downstream MPA/MMA

Outcome 3.1 SLM and Climate Smart Agriculture (CSA) techniques and technologies implemented by local communities in 3 upper watersheds (Buccament, Yambou and Kingstown) covering 1200 ha resulting in threats to ecosystem functions (encroachment, pollution, sedimentation) being reduced in landscapes surrounding the Central Mountain Forest Reserve and downstream coastal and marine sites.

Outcome 3.2 Validated SLM practices support ridge to reef management process and provides inputs to national level INRM strategy and regulation.

Outcome 3.3 Increased diversification of income in households disaggregated by gender.

Output 3.1 Improved SLM practices in 3 upper watershed landscapes in and surrounding the Central Mountain Forest Reserve, with watershed management plan developed and implementation initiated in the pilot Ridge to Reef site.

82. *Output 3.1.1 Improved SLM practices in 3 upper watershed landscapes in the Central Mountain Forest Reserve.* The project will support SLM practices in 3 upper watershed landscapes within the CMFR to reduce deforestation, land degradation, and soil erosion. It will also reduce direct impacts in lower watersheds, and in downstream coastal ecosystems and marine sites. All 3 upper watershed areas are KBA's within the proposed CMFR. The Buccament Watershed (Dalaway and Kingstown KBAs, the Project's pilot Ridge to Reef (R2R) site, connecting to the downstream proposed Leeward Coast Marine Park), the Kingstown Watershed (Kingstown KBA, connecting to the downstream existing South Coast MPA) and the Yambou Watershed (also Kingstown KBA) will be supported by SLM and CSA activities. Supported R2R interventions will include reforestation (37 ha) on steep slopes with native forest species using fly/mobile nurseries and removal of invasive species, management (59 ha) of existing plantations of non-native species (thinning, interplanting with native species to initiate conversion to native forest), and soil management (31 ha). The Project will support the provision of equipment, tools and temporary field staff to assist Forestry Services and SWCA in the implementation of these activities, and supervision and technical support from the contracted Project SLM Expert and Forester. Hiring of women will be encouraged. These activities will promote overall strengthened ecosystem integrity and connectivity, which can increase overall resilience to the impacts of climate change (addressing SESP Risk 7) and the potential impacts of climate change.

83. **Management of existing forestry plantations** within the proposed forest reserve boundary. Forest plantations were started as part of a 1980s CIDA funded reforestation program in an effort to push exotic species from deforested areas using fast growing species (primarily the non-native Blue Mahoe *Taliparitielatum*,)[65]. This reforestation programme was initiated primarily after banana plantations were abandoned consequent upon the loss of preferential UK market. Degraded and overgrown plantations shade understory light and prevent regeneration of native species. The Forestry Services has initiated the planting of native species within thinned plantation sites. Plantation management will cover the 22 ha in the Buccament watershed, 22 ha in the Kingstown watershed, and 15 ha in the Yambou watershed / Montreal area. All sites will be adjacent to the forest boundary and accessible from existing Forestry Services feeder roads. The Basic Needs Trust Fund (BNTF) feeder road program will support the grading of roads to support the removal of the extracted and selectively harvested trees, under the supervision of the Project SLM Expert and with input from the CTA/Biodiversity Specialist. Thinned forests will be mixed with native species seedlings, providing mixed-strata forest to support biodiversity, in addition to native forest regeneration when the plantation is harvested over time (beyond the life of this Project).

84. **Reforestation**. The project will support the Forestry Services' implementation of its Forestry Enhancement Programme with native species reforestation in the identified priority steep slope areas. A total of 37 ha will be reforested (Buccament 8 ha,

[65] This reforestation program was initiated after banana plantations were abandoned due to the loss of preferential UK market for export

Montreal 12 ha, and Kingstown 17 ha). Priority was determined based on slopes gradient and risk of erosion (based on past landslides and the landslide susceptibility map[66]). The Forestry Services also identified priority areas on abandoned agricultural plots within the crown lands (above 305 m contour) that are at high risk of land degradation. The Forestry Services will establish nearby fly/mobile nurseries and temporary field nurseries to support seedling propagation, eliminating the need to transfer seedlings from propagation centers and the Forestry Service compound. Reforestation efforts will be supported by the use of locally propagated seedlings from the appropriate climatic zone. Additional activities will include the removal of invasive species from the reforestation sites, and input of reforestation records into the CIMS. A maintenance and monitoring program will be developed and implemented, to be continued post Project.

85. **Soil conservation measures** will be implemented over 31 ha (Buccament 15 ha, Montreal 10 ha, and Kingstown 6 ha), supporting National Soil Conservation Programme implemented by the Ministry of Agriculture's Soil and Water Conservation Unit and forging synergy with the ongoing Soil Fertility Mapping Project. The Project will further strengthen the implementation and monitoring of the National Soil Conservation Programme (funded by the government since 2005), that works with farmers and land users on soil conservation techniques, with monitoring and enforcement of inappropriate land management activities. The Project will also support activities on forested and abandoned agricultural land and along riverbanks within the Crown Lands above the 305 m contour. Native species and soil conservation techniques tested and proven will be used. The Project will assist the Soil and Water Conservation Unit, the Forestry Services, and the Agricultural Extension Services in identifying and prioritizing the sites for riverbank stabilization, for soil conservation interventions, and in the overall planning, implementation and monitoring of these activities. Design of a georeferenced monitoring catalogue of soil conservation measures implemented under the National Soil Conservation Programme/Soil Fertility Map Project will be undertaken and integrated into the CIMS (Output 1.1). This will facilitate ongoing monitoring and documentation of successful soil conservation techniques and efforts associated with Project (linked with Output 1.2).

86. *Output 3.1.2 Watershed management plan developed, and implementation initiated.* The Buccament Watershed is the project's pilot R2R intervention site where INRM activities and programmes will be piloted for national replication. The 2026 ha site extends from the CMFR to the proposed leeward coast Marine Park. Within this R2R site, activities will be implemented below the proposed reserve (and KBA) boundary, extending SLM measures along with Climate Smart Agriculture, riverbank setbacks, the River Stabilization Programme, and integrated natural resource management to downstream areas. The process will begin with an analysis of the experience and lessons learnt from the Integrated Forest Management and Development Project (a five-year project that ended in 2002) and build on lessons learned from the GCCA / CEPF funded Cumberland Watershed Management Activities and the IWECO interventions in the Perseverance Watershed. The aim for the R2R pilot site is to move to inter-sectorial management of natural resources, beginning with a focus on water, following the Integrated Watershed Management Plan (CEPF) for the Cumberland Watershed[67]. R2R pilot watershed management plan's monitoring programme will integrate STAP recommended monitoring or ecological indicators (Total Nitrogen) and measurement as suggested by the Watershed Partnership Initiative of the US Coral Reef Task Force[68] to help determine the efficacy and evaluate the success of management efforts to reduce land-based sources of pollution.

87. Based on extensive stakeholder consultation, community and user group participation, including representation for women and youth and using a participatory planning process, the Project will support the development of a Buccament gender responsive Integrated Watershed Management Plan. The development of this management plan and its implementation will include key government stakeholders, private sector, NGOs, and men and women community members. An Inter-sectoral Watershed Management Committee will be established that will include key government institutions and community stakeholders, ensuring gender equity, and its role and responsibilities supported by MOUs and other coordination mechanisms (see output 1.3). Criteria for the watershed management committees will be developed, with consideration given to the presence and active participation of women. Implementation will be initiated jointly by Forestry Services, National Parks, Rivers and Beaches Authority, Fisheries Division and the Inter-sectoral Watershed Management Committee, ensuring ongoing engagement and participation with men and women community stakeholders.

[66] The landslide susceptibility map was developed under the World Bank/Climate Investment Fund's Pilot Program for Climate Resilience/ Disaster Vulnerability and Climate Risk Reduction Projects (PPCR/DVRRP)

[67] The Integrated Watershed Management Plan (CEPF) for the Cumberland Watershed was developed in the mid-late 80 to early 90's.

[68] S. Holst Rice, P. Bradley, H. Slay, W. Wiltse, D. Polhemus, C. Storlazzi, T. Montgomery, P. Sturm, R. Viqueira, T. Callender, M. Curtis, and J. Dean. 2016. United States Coral Reef Task Force Watershed Partnership Initiative: Priority Ecosystem Indicators. Washington, DC. 56pp.

88. Soil Conservation measures will be implemented in the Buccament Watershed, linked to the development of a National Soil Conservation Programme with the monitoring systems piloted in the Buccament R2R setting (see Output 1.1.2). The Project will assist the Soil and Water Conservation Unit, the Forestry Services and the Agricultural Extension Services in identifying and prioritizing the sites for soil conservation measures, for riverbank stabilization interventions, and in the overall planning, implementation and monitoring of these activities. A visual booklet with information on traditional soil and water conservation techniques will be compiled for the modern techniques suitable for the local context and topography, providing guidance on how to prevent and tackle various cases of land degradation (Comp. 1). Soil erosion from steep upland areas of the three target watersheds, together with water quality indicators will be monitored. Building on the experience, skills and equipment acquired and processes established for the monitoring of the South Coast Marine Managed Area, and in line with the full R2R approach, CWSA run water quality and quantity monitoring for sedimentation and its impact on the coral reef and the marine environment will be implemented in the Buccament Bay (also see Output 2.2). Capacity and equipment needs for Soil and Water Conservation Unit, Forestry Services and Agriculture Extension Services will be assessed. The monitoring plan will be designed and implemented (see Output 1.3) with the leadership and collaboration of the Technical Advisory Committee (Output 1.3). The necessary monitoring equipment for the three target watersheds, (i.e., sedimentation traps, measurement devices etc.), resources and relevant staff training will be provided by this Project. The program will combine application of field-testing kits with laboratory testing services. Appropriate manuals and toolkits will also be developed and disseminated in the simplest of language forms.

89. The Project will also pilot the establishment of buffer zones between agricultural lands and the river-banks in the Buccament watershed, based on the lessons learned from implementation of the Cumberland Watershed Management Plan. Though supported by the National Land Policy, definition and setback criteria are lacking and will be developed through this Project. These activities will be informed by outputs of the Livelihood Action Plan (Output 1.2) to address the SESP Risk 8 of ecoomic Standard practice identifies 66 ft (20 m), but this setback was too large for small farms (per SWCA), and thus each farm / case has been analyzed on case by case basis with a 33 ft (10 m) setback often implemented.

Output 3.2 National learning centers and demonstration sites on CSA and SLM

90. *Output 3.2.1 Upgrade propagation stations (that serve 2 Agricultural Regions and the 3 Project target watersheds).* The Project will use the Wallilabou and Dumbarton Propagation Stations and the Montreal upper watershed site as the 3 field-based demonstration plots and national learning centers. Under this Sub-output, activities will upgrade and climate-proof the 2 National propagation stations (Wallilabou and Dumbarton Propagation Stations). This includes enhanced water supply systems, rainwater harvesting structures, flood protection, and protective structures for extreme weather events and other needs identified. To affect this, an assessment of the station's needs will be carried out by a CSA and propagation expert to determine their operational and technical needs (equipment, capacity and financial), the sustainability of the effort and the potential for up-scaling and using the stations as incubators to support the establishment of additional stations. Further, these stations will serve as pilot sites / models for enhanced sustainability of climate resilient agricultural propagation, CSA systems demonstration, training and practices, water storage, composting, and harvesting. Both Dumbarton and Wallilabou have the potential to harvest water from nearby streams and thus reducing their operational cost and increase their reliability as a source of planting material to support both forestry and agriculture. All demonstrations, trainings and Extension Services outreach and communication will ensure that beneficiaries include women and vulnerable groups in the development of selection criteria, with training materials, communications and outreach conducted in simple.

91. **Wallilabou,** a Plant Propagation Station and Agricultural Extension Services' Base for the entire Leeward coast, and an operating center of the Pineapple Cooperative since 2008, is easily accessible and has large grounds. The project's interventions will focus on improving the tree crop and seedling propagation capacity using climate resilient species, as possible, and on demonstration of sustainable land management and climate smart agriculture practices and will improve the water harvesting, water management and irrigation system. It will set up a greenhouse for tree crop and seedling propagation, fence around the seedlings' production plots, propagate and distribute climate resilient varieties of root crops (dasheen, potatoes, sweet potatoes, vegetables and yams and others), set up composting facility using manure from the nearby Belmont Livestock Station to produce substrate for seedling production and to demonstrate various types of composters made of locally available materials. An arrangement will be explored to make this compost available to farmers and help farmers develop their own composting facility. Further the project will improve the shade houses and demonstrate models made of locally available materials for growing vegetables in limited spaces, using the experience of National Women Council project and techniques feasible for both men and

women. Various types of solar dryers will be demonstrated for replication. The existing cocoa plot will be modified to demonstrate agroforestry practices for cocoa farming and pruning, breadfruit pruning and coconut selection.

92. **Dumbarton** Plant Propagation Station serves as the Agricultural Extension Services' Base for the Windward coast. The Project's interventions will focus on improving the tree crop and seedling propagation capacity and on demonstration of sustainable land management and climate smart agriculture practices including improving rain water harvesting, water management and irrigation system; a greenhouse will be set up for tree crop seedling propagation. Climate resilient varieties of root crops (dasheen, potatoes, sweet potatoes, vegetables and yams and others) will be propagated and distributed; various types of composters made of locally available materials will be demonstrated to support organic agriculture including the growing of passion fruit. Shade houses, small space agriculture technology and solar driers will be developed replicating the work at Wallilabou, maintaining technical feasibility for women.

93. **Montreal.** The Montreal site will serve as a demonstration site for CSA, reforestation and outreach; working with farmers on plots leased adjacent to the Forest Reserve boundary to implement climate smart agriculture in this water catchment area. Noting the decline in water during the dry season, this project will augment farming efforts in the catchment area by providing CSA technology including water harvesting and storage, agroforestry on abandoned agricultural plots and existing education trails will be expanded and supported with interpretation and signage.

94. *Output 3.2.2 Demonstration sites as National learning centers.* The Project will use the two National propagation centers and the Montreal upper watershed site as the 3 field-based demonstration plots and National learning centers to promote gender-inclusive CSA technology and best practices and equip men and women local farmers to implement these practices and technologies. Each site will be located in a different climatic zone to support use of climate resilient crop varieties with varying rainfall, soils type, temperatures, and wind regimes. At each of the sites, demonstration of shade houses, climate resilient crops, CSA technology (irrigation, water management, organic fertilizer), and production techniques for different agricultural climatic zones will be supported. Agriculture Extension Officers will be trained through the Project, including women staff at the propagation centers. Gender-inclusive outreach by Agriculture Extension Officers and other trained personnel will expand to include farm and community visits and structured radio programs, announcements, written materials and on-site model farm trainings / workshops. At least 300 farmers, including at minimum 30% women, will be trained at the various sites and further outreach to farms and communities will also take place.

95. Collaboration with SVG technical college will be explored to integrate training programmes into the curriculum of this tertiary education system, as a means of anchoring Project impacts and ensuring sustainability of the lessons learnt. Expansion of ongoing collaboration efforts will also be explored with farmers. Successful production techniques will become tools for the MARFFIL's Extension Services Officers., This ensures that low cost technologies (composting for cheaper fertilizer, water harvesting and irrigation, solar drying) will become routine training and implementation methodology using techniques for both men and women integrated into Extension Services workplan and practices.

96. *Output 3.2.3 Expand SLM and CSA techniques and technology to farmers through strengthened extension services, providing equipment, training and access to information through a CIMS.* The project will strengthen the Extension Service of the MARFFIL by 1) providing training in enhanced technologies needed to support CSA; SLM technologies rooted in good agricultural practices (GAP); and monitoring for results-based management using GPS and appropriate documentation. 2) Providing basic equipment and tools for field staff; currently the extension officers share the limited equipment across the five agriculture zones island wide, some of which are obsolete and of little value, 3) Improve communication with farmers and farming community through the provision of gender inclusive education and information material, 4) improve data collection, storage and dissemination techniques, 4) Improve access to data through the Project supported CIMS (through Sub-output 1.1.1) that will incorporate new baseline data, outputs of ecological assessments and inventories, and incorporate a BD and SLM Tracking Tool and monitoring programmes.

97. The extension officers will be the link between the project and the farmers. They will assess the female and male farmers' needs in terms of equipment, technology, and inputs (planting material, fertilizers, training); transfer appropriate technology to the farmers through community training and / or visit to the demonstration and training/learning centers; make recommendations to the project team who will provide support equipment through a collaborative arrangement with merchants through the propagation centers, supporting implementation of low cost technologies for producer implementation. With the support of the

project, the capacity building, equipment and teaching material needs will be assessed and provided taking into account men and women's needs, the beneficiaries and the interventions identified, prioritized and planned and a yearly workplan prepared and implemented, with the lead of the Agricultural Extension Office. The Technical Advisory Committee along with the Project SLM expert will continue to provide technical guidance to male and female producer beneficiaries, and taking into consideration vulnerable communities, youth and women farmers living in areas with high risk of forest encroachment, soil erosion, landslides, pollution.

98. Along with climate resilient seedlings propagated at the center, the Project will support a Micro Capital Grant to support farmer implementation of enhanced CSA production practices and sustainable livelihood initiatives (to be described in Output 3.3). This micro-capital assistance will be available to women as well as men and in the form of small grants for the procurement of equipment / supplies for approved grants. This Micro Capital Grant will be administered by the PMU, though during Project inception options for management through the Farmer Support Programme (FSP) will be explored along with Project supported capacity to the FSP to evaluate, monitor and track grant process. The decisions to award funds will be made using a competitive basis and will follow a similar structure as the GEF/UNDP Small Grants Program model and other non-GEF small grants facilities available in the country, including grant approval time, programmatic and operational risk management, among other aspects, which has been used to establish local granting mechanisms. Strict criteria for grant approval will include (to be defined during implementation) farmer participation in trainings at the Propagation Center, identify CSA / SLM activity that they will be implementing, ensure equal benefits to women, and commit to providing recording changes in productivity / land degradation to Extension Officers. Also, as part of the grant process, the Project with support of the extension services, will provide training and support to grantees to ensure effective implementation and use of the equipment and/or supplies procured. The Extension Officers will keep track of the farmers' use of the equipment and technology to monitor the effectiveness and proper usage of the new tools and practices adopted by men and by women. Beneficiary farmers will commit to recording changes in their production levels so as to report on outcomes and lessons learnt. These efforts will augment baseline efforts currently being implemented by IICA to implement discrete CSA practices in St Vincent (i.e. supply of water tanks for storage).

99. *Education and Youth Outreach*. The project will further explore collaboration with the SVG Community College and propose opportunities for students to be involved in the project's implementation as part of their mandatory traineeship programme. Partnerships will be created in particular with the Environmental clubs of the Community College, secondary school focused Young Leaders Programme yearly project competition and local NGO / CSOs. The Forestry Services promotes the agro-forestry and fruit tree planting through primary school Fruit Wednesdays campaign, combined with the government school feeding programme. The project will also support secondary schools' and the SVG Community College's agricultural education and Youth Leaders Programme. Training, awareness and planting materials and tools, as well as field visits to the demonstration sites and the Biodiversity Interpretation Center, will be supported.

Output 3.3 Sustainable livelihood programme developed

100. Agriculture and its derivatives are significant contributors to livelihood in SVG. This Project aims to build on existing efforts to create sustainable livelihoods in the immediate vicinity of the CMFR and in the Buccament Watershed. A key aspect is ensuring the equitable involvement of women, since women in SVG traditionally make up a significant portion of the local agricultural sector including post-production activities. There are fewer females in positions of leadership in agriculture, in general, but higher levels of involvement and leadership in the overall value chain (such as processing and marketing). There are constraints to their level of involvement, and access to support, such as extension services, is traditionally more available to men. The Project will support livelihood activities that: 1) clearly contribute to alleviating threats or pressures on biodiversity (species or ecosystems) in the Project intervention areas, 2) establish a value chain where farmer supported CSA produce is used for post-production activities, 3) are based on partnerships with existing initiatives (i.e. Center for Enterprise Development/CED's Compete Caribbean Initiative, VincyKlus, Beekeepers Association, IICA), 4) enhance existing post-production initiatives (i.e. Beekeeping Association, St. Vincent, Grenadines Network of Rural Women Producers, CED, IICA) through a cluster / co-op approach, and 5) that contribute to enhanced livelihoods for women and vulnerable groups. The Project will work with a Community Engagement Specialist with the support of the Project Gender Specialist to identify Project sustainable livelihood beneficiaries and livelihood activities for support using a participatory and consultative approach and ensure the equitable participation of women and vulnerable groups.

101. *Output 3.3.1 Identification of priority beneficiaries***.** The Project will support the development of socially inclusive criteria for the selection of priority beneficiaries (including institutional and community organizations, NGOs, CBOs and individuals) to be

engaged sustainable livelihood initiatives. Selection criteria will include but not be limited to women and youths, priority sector initiatives listed in the National Economic and Social Development Plan[69], unemployed persons and persons below the poverty line with business ideas, small businesses and home-grown cottage industries. Community groups and stakeholders in the target watersheds identified during this project development include St. Vincent and the Grenadines Network of Rural Women Producers (SVG-NRWP), Beekeepers Association, Women in Agriculture for Rural Development and Buccament Development Organization. The sex disaggregated socio-economic / livelihood surveys conducted under Sub-output 1.1.2 will provide the necessary basis to identify women, men and youth likely to be affected by the implementation of conservation measures.

102. *Output 3.3.2 Assessment of previous efforts to develop income-generating activities***.** An assessment of efforts made under previous and complementary projects to develop income-generating activities (IGAs) that benefit communities will be undertaken, such as CED Compete Caribbean initiative (a not for profit organization established by the government to provide business development services) and Vincy/Klus (a collective or cluster of agri-businesses in SVG), with input from community groups identified during this Project development (St. Vincent and the Grenadines Network of Rural Women Producers (SVG-NRWP), the Beekeepers Association, Women in Agriculture for Rural Development and the Buccament Development Organization, and any other relevant group or project). This assessment will analyze any gender effect and will occur through open dialogue with the community members and stakeholder who were involved in those initiatives. This analysis will draw lessons and identify best practices, including CSA and SLM, as well as favorable conditions and constraints that contributed to their success or failure. The results of this analysis will be discussed in a workshop gathering a wide array of stakeholders – from the private sector, development organizations, communities involved in these initiatives – to develop realistic recommendations for effective and sustainable IGA options. The results of the analytical work and workshop will be summarized in a document. On this basis, the project will formulate a gender inclusive sustainable livelihood strategy that will help to effectively alleviate pressures on biodiversity in the CMFR and the Buccament watershed.

103. *Output 3.3.3 Identification of livelihood activities***.** Through this stakeholder engagement process, the Project will continue to engage women and men in communities in and around the CMFR to define sustainable livelihood activities suited to specific local circumstances and needs, that contribute to alleviating threats or pressures on biodiversity (species or ecosystems) and that incentivize agriculture products generated using CSA and sustainable agricultural practices. An analysis of existing marked demands for livelihood activities and products identified will be undertaken, as well as a gender analysis of the value chain will be completed to support initiatives that address women's underrepresentation in the sector and ensure their participation in the markets identified, helping to ensure their equal access to Project benefits (SESP Risk 2). Activities explored will include creating alternative jobs in conjunction with cluster enhancement (CED Compete Caribbean initiative) and cottage industry (i.e. post-production agro-processing initiatives); improved honey-based product production; building on the experiences of CED Compete Caribbean initiative, Vincy/Klus; market fresh local products to restaurants, hotels and other commercial enterprises. The Project will also partner with IICA to build on its efforts to expand entrepreneurial and organizational capabilities of agribusiness stakeholders and producer organizations, which are mostly operated women. The Project will also support the national efforts to increase production and use of priority national crops, such as breadfruit, banana, coconuts and watermelons.

104. *Output 3.3.4 Development of partnerships and collaborations with existing organizations and support implementation of sustainable livelihoods initiatives.* In line with the identification of livelihood activities that develop the value chain for CSA produce and post-production market, the Project will support the development and implementation of the following initiatives that support sustainable livelihoods and ensure women's roles are integrated and strengthened.

(i) Agro-processing / post-production cluster (co-op) support. The Project will explore a partnership with CED Compete Caribbean initiative and Vincy/Klus to support the development and implementation of a cluster project(s) in SVG, enabling groups (both formal and informal) and individuals to share costs the use of communal spaces and shared costs for agro-processing and post production of CSA produce from Project beneficiary farmers. The Project will support the development of cluster(s) (co-op) that supports the value chain of CSA produce in post-production, emphasizing environmentally friendly products incorporating CSA and SLM by providing space (containers, refurbished) and equipment with a financial sustainability mechanism integrated (i.e. rent to support operating costs and build ownership). These clusters will have clear criteria

[69] National Economic and Social Development Plan. 2013-2025. Government of St Vincent and the Grenadines.

established for the integration of CSA produce so as to develop and / or strengthen the value chain for CSA produce and women's role in agro-processing and the value chain.

Beekeeper Association. Further, the Project is proposing support for the Beekeepers Association with innovative bee house set-up (container space with refurbishment) for honey processing; technical and business related trainings; support for revival of apiculture in SVG based on improved suitability mapping for hive locations (this aspect will be embarked on as part of the biodiversity assessment in Sub-output 2.1.2), model apiaries set-up and production (i.e., complete mature hives), the planting of native flowering trees in conjunction with soil conservation and riverbank stabilization measures (sub-output 3.2.4); and improvement of the Beekeepers Association market and vending space in Kingstown, in the form of some equipment. As beekeeping in SVG has suffered in recent years due to disease in the bee population, the need for more queen bees in order to grow more hives, and lack of appropriate space for apiculture. The Project will encourage women's participation to reach at minimum 30% of the total beneficiaries. Additionally, the location of the existing hives needs to be assessed for suitability for vegetation/flowering plants, as site selection and hive placement is critical. Training activities will include bee stock and wax production, honey processing and packaging will be conducted and storage capacity enhanced, with necessary hygiene and safety standards ensured. Sustainability will be ensured through a MoU, business plan, defining roles, responsibilities, processes, maintenance and financial mechanism. The facility will be container based.

105. The Project will further support implementation of sustainable livelihood initiatives (at minimum 8, including 4 agroprocessing) in the Project target sites through the same Micro Capital Grant process for small grants described in Output 3.2.3. These individual or community-based initiatives will support the CSA value chain and support women-owned business / initiatives. Beneficiaries will be selected based on criteria developed by a multi-stakeholder group, considering aspects such as gender equity, socioeconomic vulnerability and the identification of Project beneficiaries (output 3.3.1) and livelihood activities (output 3.3.3), among other factors. The decisions to award funds will be made using a competitive basis and will follow a similar structure as the GEF/UNDP Small Grants Program model and other non-GEF small grants facilities available in the country, including grant approval time, programmatic and operational risk management, among other aspects, which has been used to establish local granting mechanisms. Recognizing the under development of the value chain and women's high representation in the agro-processing segment, the project will provide training and support in the application and proposal process to ensure women are not impacted negatively and/or lose control of this segment of the value chain. The grant instrument will be managed by the Project Implementation Unit with an advisory committee made up of local stakeholders including the Ministry of Agriculture and Lands, private sector associations, leading businessmen and women, and aid agencies specializing in sustainable agriculture and natural resources management. Grants will complement the capacity-building support to small businesses by eliciting innovative ideas from both the supported small businesses and other budding entrepreneurs with the potential to grow into small businesses. Links will be made with project supported CSA producers in the Buccament pilot R2R site as well as producer recipients of the small grants provided through the Micro Capital Grant process. Projects will be supported by a feasibility studies based on a realistic assessment of the market, including an assessment of the sustainable availability of required inputs, especially for natural resources, and assessment of its social acceptability for local communities. The Project will incorporate lessons from the Banana Accompanying Measure efforts in agricultural diversification and market competitiveness.

106. In addition, grant recipients (including producers in Output 3.2.3), local communities, clusters / groups and individual men and women will have access to technical trainings related to the establishment and management of microenterprise and financial education; guidance for the drafting of a business plan and creation of an income generating activity; support for the preparation of dossiers for access to micro-financing; and support for the inception and implementation of the activity; and follow-up of the microcredit reimbursement. At minimum, 50% of participants should be women. The Projects' Community Engagement Specialist will work with organizations specializing in micro-enterprise development to help local communities identify opportunities and select acceptable and promising projects. The Project will also facilitate their access to micro-financing opportunities for implementation of these initaitives, incorporating strategies and lessons learned from Grenada GEF-6 Project and others throughout the Caribbean and elsewhere[70].

Component 4: Knowledge management for SLM, CSA and biodiversity conservation.

[70] Such as SWIFT/Fair Trade program in Swaziland and South Africa sustainable business growth programme.

Outcome 4.1 Knowledge and experiences captured, shared and widespread adoption of gender responsive CSA, SLM and biodiversity conservation practices encouraged.

Outcome 4.2 Monitoring and evaluation of project implementation, outcomes and outputs ensures project effectively reaches outlined goals and objectives.

107. This component focuses on capturing both technical and educational knowledge and lessons learned during the implementation of the project. It is focused on ensuring that knowledge is effectively collected and managed in support of the conservation of BD and ecosystem services in productive landscapes in threatened forested mountainous areas that also benefits men and women. To achieve this, the project will pursue the establishment of a knowledge management strategy that focuses on the production of knowledge products, and the wider communication and dissemination of project lessons and experiences to support the replication and scaling-up of project results. Knowledge and experiences will be captured, shared and disseminated to encourage widespread adoption of CSA, SLM and biodiversity conservation practices. The project will ensure that sex disaggregated data on experiences and lessons learned generated at the demonstration sites and from implementation of activities are systematically collected, analyzed and disseminated throughout the country to facilitate awareness, replication and scale-up. Monitoring and evaluation of project implementation, outcomes and outputs will ensure project effectively reaches outlined goals and objectives.

Output 4.1 Technical knowledge captured, experiences and lessons learned disseminated.

108. The project's Communications/Knowledge Management Expert will lead, in conjunction with the project manager, the PSC and the MARFFIL will systematize of Project experiences in CSA, SLM, biodiversity conservation, IAS, sustainable livelihoods and gender mainstreaming in CSA. The systemization of the experiences will be carried out periodically and will be used internally to inform the project management team in its execution functions, the Ministry in its implementation, and the project's stakeholders and male and female beneficiaries on the project's progress. The lessons learnt will be input to the project iterative management process and the necessary adjustments made to the project's design, as necessary, to reflect the lessons learnt. The systemization will occur at several levels including at the project management level, stakeholder involvement and management levels, project activities and best practices in the component and activities levels[71].

109. A KAPB survey (Output 1.2) will be conducted which will provide sex disaggregated baseline information on the local stakeholder groups knowledge, attitudes, practices/perceptions and behaviors on the issues pertaining to land degradation and natural resources use. The information garnered from the KAPB will guide the development of targeted communication and awareness strategies and provide inputs into the development of audience appropriate knowledge materials. Communication materials from other GEF Projects will be reviewed for possible use and/or adaptation in the development of SVG's communication materials.

110. The Project will also support the organization of fairs, community-to-community sharing of experiences, and foster information exchanges on best practices, including documenting lessons learned to ensure benefits reach women and vulnerable groups. The lessons learnt, and best practices will be compiled, collated and packaged in several formats geared towards specific target groups and audiences. Case studies and thematic reports will capture the best practices in CSA, sustainable livelihoods financing and incentivization agro-processing and general project activities interventions and impacts. These case studies and thematic reports will be geared towards the technical staff of the MARFFIL and other governmental ministries and departments. Printed and electronic products will be developed and disseminated to all the governmental and other technical stakeholders. The products will be placed on the website of the MARFFIL other Governmental agencies and institutions. Written documentation of knowledge incorporating institutional strengthening and capacity building initiatives, for continued institutional and private sector learning and activity implementation. Curriculum will be developed from training programmes at the Biodiversity Center that targets both government personnel and producers. Curriculum development and training material will synergize with the curriculum of Technical Division of St Vincent and the Grenadines Community College. These knowledge products and lessons

[71] UNDP 2018, Climate Information & Early Warning Systems Communications Toolkit, 2018 at http://adaptation-undp.org/resources/training-tools/climate-information-and-early-warning-systems-communications-toolkit

learned will also be disseminated to other SIDS and Caribbean countries as examples of best practices. The dissemination will occur via varied means including, placing on regional websites and knowledge forums, presentation at regional activities and meetings on the subjects including regional meetings on adaptation to climate change, agriculture, biodiversity, and efforts at mainstreaming the Rio Conventions on Climate Change and Biodiversity. In its preparation of the case studies and thematic reports, recognition of linkages to other GEF and Government of SVG projects in climate change, social development, gender empowerment, agriculture, biodiversity and conservation will be made. The knowledge products produced will be linked to these other project's sites for their target groups consumption as well.

111. Participation in local, national and international forums, meetings, conferences, knowledge practice groups to disseminate the lessons learnt as well as garner information on best practices in the project activities with the intention of inclusion in iterations in the project design. Lessons learnt and the experiences of gender mainstreaming in the agriculture sector and natural resources management will be systemized in stakeholder specific formats. Case studies and thematic reports will be developed for technical personnel. These will also be disseminated to the Ministries and Departments of the Government of SVG. The products will also be placed on the website of the MARFFIL, Government of SVG websites including the Department of Gender Affairs, Ministry of National Mobilization, Social Development, Family, Gender Affairs, Persons with Disability. The focus of the knowledge products on gender will be examples of successful women farmers and women agro-processors, the project's experience in gender mainstreaming in its grant recipients, tools used for gender mainstreaming and the mechanisms in the project cycle that allows gender mainstreaming, the household level impacts of the project on female-headed households. The knowledge products will be based on data collected in the project's baseline sex disaggregated socio-economic and the socio economic and gender monitoring system that will be established. These knowledge products will be disseminated to other SIDS countries as examples. The dissemination will occur via varied means including, placing on regional websites and knowledge forums, presentation at regional activities and meetings on the subjects including regional meetings on adaptation to climate change, agriculture, and efforts at combatting desertification. Quarterly knowledge forums will be held where the project will share lessons learnt with the PSC, project beneficiaries, governmental and other stakeholders and implementers of similar projects in St Vincent. who is responsible for developing these?

112. At the national level, the focus will be on disseminating lessons learned and best practices on CSA & SLM approaches derived from the project activities to farmers, farmer associations, producers, agroprocessors, CSOs / community leaders, and resource managers to ensure benefits reach both men and women. Much of this information will be derived from the field activities on agriculture and land rehabilitation carried out under Component 3, including for example information on practical, low-cost soil conservation strategies that also positively impact yields, low-cost watershed restoration approaches and developing / demonstrating SLM /CSA techniques appropriate for men and women. These lessons and practices will be carefully documented so that they may benefit male and female farmers throughout St Vincent as well as other parts of the region.

113. The project will explore establishing a project website where all thematic reports and cases studies will be accessible. This website will be linked with SVG's Government website and maintained by Information Technology Services Division, and space will be sought on the MARFFIL website for the online storage and dissemination of reports and case studies. A Facebook page and other social media will be established for the project that will serve both for reports and case studies dissemination as well as public and community awareness.

Output 4.2. Media products promote outreach and increased public awareness / environmental education of gender inclusive SLM, CSA and biodiversity conservation will be disseminated through videos, photo essays, fact sheets, web platform, television, exchange site visits by communities and producers involved, also dissemination.

114. Knowledge products on CSA and SLM practices for farmers developed by the project will be collected and formatted in farmer-specific formats. These products will be designed on the findings of the KABP study that will establish the baseline on the knowledge of CSA, SLM and other practices among farmers and other local stakeholders. These formats will include radio/TV public service announcements, SMS (which has been shown to be an effective communication tools for farmers and fishermen in the Caribbean), and printed materials. A printed and or electronic tool-kit for farmers on CSA would also in a reader-friendly format provide the basics of CSA in SVG. Additionally, a toolkit or handbook on the basic of agro-processing will be produced. Child-specific information on the importance of ridge to reef approach in addressing environmental degradation in SVG will be produced.

115. Products will be developed that target the stakeholders at the community and village levels, including women and farmers groups. This information will be captured in printed forms such brochures and flyers and electronic forms including short videos and impact documentaries in jargon free language and the use of local expressions. These products will serve both to build and enhance community stewardship and awareness of the project activities and for measuring the project's impacts.

116. Community awareness campaigns products and activities will be developed and implemented, including Facebook page, website, climate change walk, radio/TV public service announcements, billboards, murals etc. These products will target women and men in the general community of the country of St Vincent and Union Island but more specifically the parishes and communities the project activities are implemented in. The focus is both to create awareness and to build and encourage stewardship of the project in the communities. The messages should link the project activities to the community development and the aim of building sustainable communities including improving the livelihood and economic status of the communities directly or indirectly.

Partnerships:

117. In addition to initiatives and programmes outlined in the Project results (above), the Project will further build upon past and ongoing initiatives for the conservation of biodiversity, sustainable land management and protected areas.

118. GEF currently supports a number of initiatives in SVG that the project will coordinate with. The Project will build on the *Implementing* Integrated Land, Water & Wastewater Management in Caribbean Small Island Developing States (IWEco) Project that addresses policy, tools and guidelines for IWRM as well as methods for multi-scale assessment and monitoring of land degradation trends. The IWEco project will contribute to the preservation of Caribbean ecosystems that are of global significance and the sustainability of livelihoods through the application of existing proven technologies and approaches for fresh and coastal water resources management and sustainable land management that are appropriate for small island developing states, that also seek to enhance resilience of socioecological systems to the impacts of climate change. The Project will establish synergies include the IWEco work on integrated watershed management taking place in the Perseverance Watershed to promote the exchange of lessons learned, best practices and knowledge. As with the proposed Project, successful implementation lies with the willingness by decision makers to support objectives of INRM and the commitment of local stakeholders to adopt new sustainable practices.

119. Furthermore, the regional GEF / UNEP Project Preventing COSTS of Invasive Alien Species (IAS) in Barbados and the OECS Countries focuses on prevention, early detection, control, and management frameworks for IAS that emphasize a risk management approach by focusing on the highest risk invasion pathways. Though there is no national component for SVG, the nation will benefit from the regional component's focus on strengthening institutional mechanism to address IAS. This strengthened institutional framework will enhance sustainability and further strengthen this proposed Project's site-level IAS management programs being developed and integrated into the Forestry Services work program.

120. The GEF / FAO Climate Change 4 Fish Project- Climate Change Adaptation in the Eastern Caribbean Fisheries Sector will be strengthening community-based fish sanctuaries by providing resources, training and sustainable livelihood opportunities for fishers, providing synergies for the LCMP by supporting biodiversity conservation while providing economic benefits and sustainable livelihood opportunities for fishers and fisher communities to alleviate pressures on marine resources.

121. GEF is also supporting GEF-eligible Parties to the Convention on Biological Diversity (CBD), including SVG, to develop its sixth national reports (6NR) that will improve national decision-making processes for the implementation of NBSAPs, to which this Project will contribute new and current data, monitoring programmes and systems, as well as access to a centralize information management system that will help to inform the national decision-making process for the 6NR as well as for the implementation of the NBSAP.

122. SVG is one of nine countries in CARICOM participating in the GEF-IUCN *Land Degradation Neutrality-Target Setting Process*. At the end of the LDN-TSP, participating countries will have developed a set of targets, based on baseline data, which they will track until 2030 (SDG 15 commitment). The indicators are Land Productivity, Land cover and organic soil carbon. As noted under Output 1.1.2, the proposed project will support tracking of indicators for SLM that are used in the Land Degradation Neutrality Target Setting Process (LDN-TSP). Tracking of these indicators will contribute to SVG's LDN-TSP process, and will be additionally relevant if any of the pilot sites of this project are located within any of the hotspots that will be identified during the baseline study of SVG's LDN-TSP.

123. The project will also build synergies with several non-GEF initiatives, including the World Bank approved the *OECS Regional Agricultural Competitiveness* project with the objective of increasing market access and sales for selected farmers, fishermen/women, and agroprocessors from Saint Vincent and the Grenadines and Grenada. Synergies with the World Bank-funded project will be developed / strengthened so that small farmers in the GEF Project target landscapes and small post-production agroprocessors / businesses can benefit from improved value chains that support CSA / SLM and marketing opportunities these products.

124. The *Japan-Caribbean Climate Change Partnership* together policy makers, experts and representatives of affected communities to encourage policy innovation for climate technology incubation and diffusion and address the barriers to the implementation of climate-resilient technologies in a participatory and efficient manner. Furthermore, the initiative is designed to strengthen the capacities of countries in the Caribbean to invest in climate change mitigation and adaptation technologies, as prioritized in these national policy instruments, such as the Nationally Appropriate Mitigation Actions (NAMAs) and National Adaptation Plans (NAPs), upon which SVG can build and strengthen its SLM and actions to build climate resilience.

125. The Project will also help support and strengthen existing co-management arrangements between the Forestry Services and the Union Island Environmental Attackers (UIEA) for the on-site management of the Chatham Bay site (proposed Wildlife Reserve). UIEA currently carry out all on-site management activities, including hiring and managing rangers that patrol site for poaching, all in co-management with the Forestry Services. The Union Island Environmental Attackers (UIEA) are a a local NGO currently responsible for site management (overseen by Forestry Services). The project will be supporting this partnership with equipment, patrol / rangers, outreach, training in key areas (IAS management, species census, patrol, other), training for community livelihood (i.e. gecko related crafts) initiatives through UIEA that support the CSO's financial sustainability as well as promote conservation of this CR single island endemic.

126. The Project is also partnering with other CSO and local organizations in the development of sustainable livelihoods related to post-production processing of CSA related products, with a key aspect to ensure the equitable involvement of women, since women in SVG traditionally make up a significant portion of the local agricultural sector including post-production activities. This includes developing partnership with existing initiatives (i.e. Center for Enterprise Development/CED's Compete Caribbean Initiative, VincyKlus, Beekeepers Association, IICA), enhance existing post production initiatives (i.e. Beekeeping Association, St. Vincent, Grenadines Network of Rural Women Producers, CED, IICA) through a cluster / co-op approach. These partnerships will support the development of the sustainable livelihood components of the Project (i.e. Component 3.3) as well using their expertise in the development of the Livelihood Management Plan, development of the CMRFR and LCMP management plans, and CSA farming practices (i.e. St. Vincent, Grenadines Network of Rural Women Producers, Women in Agriculture for Rural Development and Buccament Development Organization).

127. Risks and Assumptions*:* As per standard UNDP requirements, the Project Manager will monitor risks on a quarterly basis and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e., when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual Project Implementation Report (PIR). The detailed risk management strategy for the project is included in Annex H.

128. Stakeholder Engagement Plan. The stakeholder engagement plan consists of several mechanisms to ensure that stakeholders are actively involved in the entire project cycle. A detailed Stakeholder Engagement Plan including a Stakeholder's Participation Plan is presented in Annex F. This annex also presents evidence of thorough stakeholders' consultation conducted during the project development phase.

129. The PSC will ensure the continued participation of key stakeholders in the project planning, implementation and M&E. The Project Steering Committee (PSC) will be comprised of representatives of the governmental agencies, private sector and special interest groups. Role and responsibilities of the PSC are presented in Section VIII. Governance and Management Arrangements. The Project Coordinating Unit will actively the stakeholder engagement and communications plans, gender mainstreaming plan, grievance redress mechanisms and monitoring and evaluation. Led by a Project Manager who receives guidance from the PSC, the PCU ensures the participation of all stakeholders and addresses stakeholder conflicts. A stakeholder's communication plan ensures efficient communication with all stakeholders. The medium will be stakeholder specific and utilize both traditional methods such as meetings, telephone calls with newer methods such as a listserv, WhatsApp broadcast messaging, SMS, etc. Attention will be given to jargon free language and translation of technical information into local dialect for local stakeholders. The unit will engage the services of communication specialists to achieve the objective of the plan. Additionally, the PCU will actively manage knowledge

by documenting processes and lessons learned and sharing them with all stakeholders. An entire component of the project is devoted to knowledge management. Local project committees will be established at the village/watershed level for the three watersheds where project activities will be implemented. These will provide mechanisms for the project to share approaches and strategic actions with local stakeholders, and, at the same time, provide a forum in which stakeholders can express their concerns, interests and suggestions on the project activities. It will also encourage participation in the project activities and enhance local ownership. In addition, a gender mainstreaming plan will secure the involvement of both genders but especially women that are often marginalized, monitor the impacts of project activities and account for their benefits from the project. All training programmes and engagement plans will use a participatory approach that is rights-based and integrates the perspectives of all users using bottom-up approaches, integrating the different views of local stakeholders and beneficiaries with those of institutions, authorities and decision-makers. It will also be gender responsive. Finally, the project M&E will be done through decentralized assessments including meetings with the local committees, interviews of direct beneficiaries and their representative organizations, local and national workshops with local and national stakeholders, and meetings with special groups such as women to document indicators.

130. Gender Equality and Empowering Women: The gender action plan supports gender equality mainstreaming in project outputs, activities and outcomes. The gender action plan includes indicators to support the monitoring of project results. The plan makes specific allowance for the collection of gender data, given its present paucity, for the effective mainstreaming of gender in the project cycle. The mainstreaming plan recognizes the different status of men and women in the society and in the agriculture, natural resources sectors and in issues associated with SLM and CSA. The project therefore provides for capacity building activities in areas of deficit for women to ensure equal participation in all of the project activities. The project recognizes women's lesser participation in the agriculture sector compared to men and will conduct gender analysis of all policies and regulatory frameworks to identify institutional and legislative barriers to women's participation. Gender analysis will be done on agricultural value chains, incentives and financial mechanisms to remove barriers and support access of women to economic empowerment opportunities. The action plan supports women's inclusion in decision making related to project implementation including facilitating their access to participate as officers in local level management committees such as watershed committees. In its monitoring and evaluation activities the project will provide both differentiated spaces and mechanisms to allow maximum participation and feedback from both women and men.

131. South-South and Triangular Cooperation (SSTrC): In recognition of the importance of SSTrC, the project has integrated the objectives of SSTrC in component 4 that address Knowledge Management and Information. The project will proactively share all the project results and knowledge products with the databases associated with SSTrC. The projects website and Facebook pages will be linked to the UN office for SSCTrC and other initiatives of other countries and the project will actively seek to engage in communications with other similar projects. The project will provide for the participation of project staff and beneficiaries in SSTrC exchange activities to allow for sharing of experiences on SLM and CSA.

132. Sustainability and Scaling up: A key factor in ensuring the sustainability of this project is through the direct involvement of local communities and small farmers from the outset of the project. The knowledge gained by farmers and other local community members through training in SLM approaches and methodologies, as well as the experience gained in their application, will be invaluable in ensuring that these approaches are actively adopted and hence contribute over time to the sustainability of the project outcomes. In addition, the benefits for these stakeholders of adopting SLM approaches, including more consistent and reliable crop production, reduced losses from land degradation, together with project activities to enable farmers to secure land tenure, gain certification of their production systems, and access new sources of credit, will motivate farmers to adopt and continue SLM practices. In addition, capacity to provide on-going training to communities in the various SLM approaches will be institutionalized in various organizations

133. The foundation for *environmental sustainability* of the project is based on the consolidation of 7 KBAs into one biological corridor, with further ecosystem connectivity linked by a source to sea continuum to a marine park, enhanced by improved management of 3 terrestrial PAs and improved landscape- and watershed-level sustainable land management. Environmental sustainability will be ensured through strengthening the policy, legal, financial and regulatory framework for protected areas and biodiversity conservation, and by including principles of sustainability into interventions that govern natural resource management practices and landscape, including productive potential and vulnerability of different landscape units and habitats. Integrating SLM and biodiversity conservation principles in watershed-level planning and management processes and through introducing a set of

climate smart and sustainable land use practices at the producer level will support soil, water, and biodiversity conservation furthers environmental sustainability. Through the project, improved capacities, available decision-making tools and enhanced access to information will be available to PA managers and co-managers for more effective planning and management of the PAs and production landscapes. Species-specific information, conservation action plans and monitoring for species of global significance will allow managers to address threats (i.e. IAS) and monitor changes. Enhanced equipment, data collection and monitoring systems for biodiversity, PAs and watersheds will provide essential information for documenting change and enabling informed decision making at the species, landscape and national level, also supporting institutional sustainability.

134. *Institutional sustainability* will be achieved through strengthening the governance and capacity of the environmental and land use management agencies, producers' organizations, CSOs, and the private sector in gender inclusive manner to support protected areas, biodiversity conservation and sustainable land management in the integrated productive landscape. Multi-sectoral institutional coordination mechanisms will be strengthened at the policy level and supported at the landscape and watershed level, with multi-sectoral management committees and piloted co-management arrangements with communities, private stakeholders, private sector all contributing to future institutional sustainability.

135. *Social sustainability* will be achieved primarily through the direct participation of local producers (farmers), local community members (including women), CSOs, and NGOs in the planning and implementation of sustainable production, protected area and landscape level watershed management, including co-management activities. Community level interventions and associated demonstration and capacity development will all support replication of interventions throughout SVG, further facilitated by knowledge management activities that will be supported through this project further supports social sustainability. This will include extensive involvement of CSOs and producer organizations and groups (clusters) with a gender focus on sustainable livelihood activities related to protected area management, production and post-production / agroprocessing with strengthened capacities, techniques, supported for market expansion and business development. With upgraded national climate resilient propagation centers and national learning / demonstrations sites, social sustainability of enhanced techniques will continue including through systematic capturing, analysis, and dissemination of the technical documentation, experiences and lessons learned through knowledge management actions.

136. *Financial sustainability* of the project's outcomes will be achieved through long-term systemic changes to sustainable financing by addressing barriers to implementation and retention of sustainable finance mechanism for PA management at the national level, supported by financial needs assessment and PA system financial planning. Implementation of sustainable finance mechanisms and PA business planning will support site-level sustainability of Project outputs. Pilot co-management arrangements (Chatham Bay) integrate financial sustainability of Project investments for post-project continuity and will be an example for replicability and scaling-up of good practices and lessons learned. Integration of project investments into existing national institutional systems, supported by equipment, training programmes and knowledge management will further ensure national ownership and post-project sustainability of investments, such as the centralized multi-departmental information management system and monitoring programmes and/or the upgraded propagation center. Financial sustainability at the community and producer level will be achieved through support for sustainable livelihood activities that can be replicated and scaled up through market identification and expansion, business planning and development. This sustainability will be further supported by training programmes implemented in collaboration with national producer organizations (i.e. Vincy Klus/Vincy Fresh) and supported by knowledge management activities.

137. Scaling up: Two (2) National Propagation Centers (Wallilabou and Dumbarton) will be upgraded and serve as demonstration sites for CSA. These sites will also serve as national learning centers for post project sustainability, with CSA best practices and adaptive techniques promoted as well as business models demonstrated for replication. Social sustainability will be ensured by promoting the active participation of local stakeholders in the development and implementation of management interventions and planning. Community level interventions and associated demonstration and capacity development will all support replication of interventions throughout SVG further facilitated by knowledge management activities that will be supported through this project. Financial sustainability will be assured through the exploration and development of financial mechanisms for long term sustainability of the protected area system. Potential for scaling up lies with incorporating the landscape and seascape approach to management to all future protected area, land use and zoning decision making in SVG. In addition, GEF investment in this project represents an important opportunity to impact SDGs – both directly and as a catalyst for other sources of financing and support. It can serve as a platform for the country to fulfill its SDG Agenda through catalytic investment. Lessons learned, and the knowledge acquired as a result of the project will be compiled and shared and used for the design of similar interventions in SVG

and bond through south-south cooperation mechanisms, and will be made use of to disseminate best practices and experiences related to biodiversity conservation and sustainable land management, including climate smart agriculture.

V. PROJECT MANAGEMENT

138. Cost efficiency and effectiveness*:* Cost-effectiveness will be maximized under the GEF-scenario by developing/improving an enabling framework that will allow the generating of multiple global benefits through various environmental management approaches, such as PAs, integrated watershed management, and climate-smart production at landscape level. This multi-focal approach to providing global environmental benefits will be more cost-effective in the short, medium, and long term than the alternative. This alternative, or business-as-usual scenario, is one where there is an insufficient policy and legislative framework, inadequate availability and access to information, insufficient technologies and access to resources, and inadequate capacities to effectively implement SLM and CSA, support sustainable livelihoods, and effectively manage an expanded PA network. This alternative is one which would result in increased loss of ecosystem connectivity, decreased representation of key ecosystems of biological and ecological value, increasing loss of key habitat for biodiversity and species of national, regional and global significance, decreasing natural forest cover, and increasing land and soil degradation.

139. The GEF scenario will enhance connectivity of protected areas, developing a biological corridor that encompasses the entire mountain range above the 305m contour, supporting conservation of biodiversity on a landscape scale. This approach strengthens the resilience of forests, biodiversity and the ecosystem services they provide, including to changing climatic conditions, and protects waters sources within PAs that are a main source of water for the nation, a cost-effective alternative compared to the high-costs of other solutions for dealing with water scarcity. This approach also reduces the impacts of land degradation to downstream and nearshore marine resources and the ecosystem goods and services they provide. Cost effectiveness is further demonstrated by establishing and improving the management capacity and financial sustainability of PAs. By addressing legal and regulatory gaps to retention of sustainable financing mechanism funds into the PA system and identifying gaps in financial needs and costs for system and site management, the GEF investment can lead to improved long-term PA system and site financing, and the availability of resources for conservation action.

140. Under the GEF scenario, the different national and local stakeholders in the project prioritized landscapes will work together to strengthen the connectivity of landscapes between PAs in the production landscapes that includes actions that will contribute to biodiversity conservation, protection of water sources, and coastal / nearshore ecosystem and that also provide social and economic benefits for local stakeholders and communities. This strategy will remove institutional, technical, capacity, and financial barriers to effectively address the causes of ecosystem fragmentation, loss of forest cover and erosion that lead to downstream sedimentation, flooding and ultimate impacts in the near shore coastal marine ecosystem. This GEF scenario is putting in place long-term effective upper watershed PA protection and SLM activities that will result in reduced degradation of biodiversity and key ecosystem services in the short, medium and long term, demonstrating cost-effectiveness and efficiency compared to business-as-usual scenario. This business-as-usual scenario is one which would require ongoing and costly inputs to address the environmental and socio-economic impacts of degradation of watersheds, its ecosystem services and the downstream coastal and nearshore marine environment that would include loss of nearshore fisheries, a major livelihood and economic source for SVG's communities.

141. The project will deliver global environmental benefits using a participatory approach and ensuring the equal distribution of benefits among men and women, resulting in the consolidation and strengthened protection of a 13,214ha terrestrial PA covering the entire upper watersheds of St Vincent and 7 KBAs, providing landscape connectivity to a marine park through a ridge to reef approach and provide benefits at the community and producer level that addresses gender segmentation, supported through field-based demonstration learning and information exchange.

142. The GEF alternative will support the development and implementation of training programs for INRM, CSA, SLM, and biodiversity conservation at the institutional level, integrated into SVG tertiary vocational training and into the GEF supported National Training Centers at the 2 propagation centers that address the needs of both women and men. By developing this in-house training capacity, this project investment will prove to be cost-effective over the long run in comparison with the solution of resorting repeatedly to expensive donor-supported projects. This long-term solution will entail strengthened institutional capacity for SLM, CSA and biodiversity conservation, supported by knowledge management, to ensure that structures supported by this

project are underpinned by institutions, partners and practitioners that have information and capacities to make informed decisions and implement appropriate land-use decisions.

143. This GEF alternative will further support partnerships between key project partners, including Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Lands, Ministry of Finance, Economic Planning, and non-governmental partners (Vincy/Klus, CED, SVG Network of Rural Women Projects, IICA, WINFA) to improve the competitiveness of producers and agro-processor micro-enterprises and co-ops/clusters that are implementing CSA /SLM initiatives and biodiversity conservation oriented approaches. The Project will build on their experience in business development, marketing opportunities and markets for sustainable production to develop cost-effective approaches for business expansion (i.e. shared spaces and equipment), including approaches that build sustainability, such as sustainable financing mechanisms (i.e. rental agreements) for Project-supported cluster / co-ops spaces and equipment.

144. Furthermore, under the GEF scenario, the adoption of climate-resilient agricultural practices and post-production activities will be promoted for small farms, co-ops and agro-processing micro-enterprises for effective management of the productive landscape within SVG's watersheds. These activities will provide benefits at the community, producer and post-production level, supported through trainings, field-based demonstration learning and information exchange. Cost-effectiveness is demonstrated through strengthening of capacities and knowledge for self-sustaining continuity without the need for costly external project support.

145. Furthermore, in addition to the strengthened enabling environment for integrated natural resource/watershed, and expanded PA system and biodiversity conservation, the GEF alternative will develop data collection, storage and monitoring systems that are integrated into government institutions and activities, and their access and availability through a multi-institutional centralized information management system that will support informed decision-making and the effectiveness of GEF-supported interventions both during project implementation and post-project implementation.

146. Project management*:* The Project Management Unit (PMU) office will be based at the Forestry Services Headquarters in Camden Park, Kingstown. The PMU will oversee the exectution of day-to-day activities for project implementation. Project staff and consultants will travel as needed to the Project sites, including Union Island in the Grenadines, and provide oversight and support to project partners. The PMU will liaise regularly with technical staff at the Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Lands, Ministry of Finance, Economic Planning to ensure ongoing and collaboration with, the relevant departments in the implementation of Project activities and their integration into work plans and programs, as outlined in the Project document. This collaboration will further ensure exchange of knowledge and the benefits of the Project from existing expertise and time contribution. The Forestry Services, the Project Executing Partner, along with the NEAB / Technical Advisory Committee will provide overall strategic oversight to this project to further the harmonization and integration with future existing and future National and agency plans and programming.

147. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information**:** To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[72] and the GEF policy on public involvement[73].

[72] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/
[73] See https://www.thegef.org/gef/policies_guidelines

VI. PROJECT RESULTS FRAMEWORK

This project will contribute to the following Sustainable Development Goal (s): Goal 2: Promote sustainable agriculture (Goals 2.3 and 2.4); Goal 5: Achieve gender equality and empower all women and girls; Goal 8 (indirectly) through conservation of ecosystem services essential for economic growth; Goal 12: Sustainable consumption and production; and Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss					
This project will contribute to the following country outcome included in the UNDAF/Country Programme Document (United Nations Multi-Country Sustainable Development Framework in the Caribbean): Inclusive and sustainable solutions adopted for the conservation, restoration, and use of ecosystems and natural resources.					
This project will be linked to the following output of the UNDP Strategic Plan: 2.4.1 Gender responsive legal and regulatory frameworks, policies and institutions strengthened, and solutions adopted, to address conservation, sustainable use and equitable benefit sharing of natural resources, in line with international conventions and national legislation					
	Objective and Outcome Indicators	**Baseline**	**Mid-term Target**	**End of Project Target**	**Means of Verification and Risks/Assumptions**
Project Objective: To enhance biodiversity conservation and ecosystem services conservation through an expanded and strengthened PA system and with SLM measures integrated in a ridge to reef approach.	Mandatory Indicator 1: Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or sub-national level, disaggregated by partnership type.	0	4 Private sector: 1 NGO/CBO: 2 Donor: 1	9 Private sector: 3 NGO/CBO: 4 Donor: 2	MOV: Mid-term and final Project report. Formal agreements (i.e. MOU)
	Mandatory indicator 2: # of direct project beneficiaries (men and women farmers/agricultural labourers, women and men along value chains) benefiting from livelihoods created through sustainable management of natural resources and ecosystem services, in the project prioritized landscapes, disaggregated by sex. (GEF Core Indicator 11)	0	a) Women: 48 (at least 30% of total beneficiaries) b) Men: 112 c) Additional females benefiting from new sustainable livelihoods created: 50 % d) Additional males benefiting from new sustainable livelihoods created: 50 % Note: Target will be confirmed during Year 1 of Project implementation	a) Women: 254 (at least 30% of total beneficiaries) b) Men: 592 c) Additional females benefiting from new sustainable livelihoods created: 50 % d) Additional males benefiting from new sustainable livelihoods created: 50 % Note: Target will be confirmed during Year 1 of Project implementation and monitored throughout project implementation	Risks: - Lack of commitment of Government and local stakeholders to biodiversity conservation and PA management - Natural disasters (esp. hurricanes) threaten forest habitat and livelihoods Assumptions: - Willingness by decision makers to incorporate objectives of biodiversity conservation, SLM and reduction in land degradation in PAs and sustainable production landscape. - Strengthened institutional framework and capacity for INRM, BD conservation, SLM with sustainable agricultural practices and supporting informed decision-making will

			and monitored throughout project implementation[74]		lead to improved overall adoption of practices and their effective implementation. - Commitment of local stakeholders to conservation, sustainable productive systems and reducing land degradation in selected areas.
	Indicator 3: Number of the following globally threatened endemic species whose populations have remained stable or increased by EOP: *Amazona guildingii* *Chironius vincenti* *Pristimantis shrevei* *Catharopeza bishopi* *Gonatodes daudini*	0	0	5 *Amazona guildingii*, *Chironius vincenti*, *Pristimantis shrevei,* *Catharopeza bishopi,* *Gonatodes daudini.*	MOV: Species Recovery and Action Plans submitted to Cabinet for approval, Species census Risks: - Conflicting land uses impede political will for approval of plans Assumptions: - There are no substantive changes in land use/cover of habitat due to natural disasters or extreme climatic events; - Willingness by decision-makers to approve and adopt Species Recovery and Action Plans and action to protect and increase species viability
Component 1: Strengthened institutional framework for Protected Areas, Ecosystem Conservation and Sustainable Land Use in St Vincent and the Grenadines **Outcome 1.1** Enhanced multi-departmental access to centralized database system, incorporating biodiversity (BD), ecosystem services, land	Indicator 4 # of targeted departments with effective use of centralized database with information for informed decision-making, as indicated by reporting of routine use (of agency outcome indicators) in annual work programme by the agencies	0 Forestry Department Fisheries Department National Parks, Rivers and Beaches Authority Physical Planning	0 Forestry Department Fisheries Department National Parks, Rivers and Beaches Authority Physical Planning	5 Forestry Department Fisheries Department National Parks, Rivers and Beaches Authority Physical Planning	MOV: Project final report. Annual work plans that indicate use of data from CIMS Functional centralized BD database populated with datasets with multi-departmental access and use in decision-making Risks: - Targeted users won't change current practices and

[74] Farmer vs agriculture labourer, total number of agriculture workers and farmers disaggregated by sex will be defined

use / cover, protected areas, climate and soil data, to support natural resource conservation and land use decision making. **Outcome 1.2**. Institutional frameworks and human resource capacities strengthened for the operationalization of the Forest Policy, PA Policy and PA system plan as well as for the implementation of related laws and regulations, resulting in improved biodiversity and ecosystem conservation and reduced forest loss and land degradation. **Outcome 1.3.** Increased capacities for financial sustainability.					incorporate data information system into practices Assumptions: - Willingness to change methods of data sharing and information collection and storage by key agencies
	Indicator 5 Number of policy, legislative, regulatory and planning instruments developed/revised (with support for submission to Cabinet) that integrate Sustainable Land Management (SLM), CSA, gender responsiveness and/or biodiversity conservation.	0 Forest Policy PA Policy (revised) PA System Plan (revised) PA Mgt Plan Integrated Watershed Mgt Plan National Land Policy Note: A legislative review will take place during Year 1 to decide what policy legislation, regulations and/or guidelines will be updated/revised. The above mentioned have been identified by the key government stakeholders.	0 Forest Policy PA Policy (revised) PA System Plan (revised) PA Mgt Plan Integrated Watershed Mgt Plan National Land Policy	6 Forest Policy PA Policy (revised) PA System Plan (revised) PA Mgt Plan Integrated Watershed Mgt Plan National Land Policy	MOV: Stakeholder consultation reports Instruments submitted to Cabinet for approval [75] Risks: - Lack of political will impede approval of plans Assumptions: -- Approval of the policy and legislative documents developed/revised/amended with Project support - Continued political will to strengthen the national governance framework to integrate SLM, Climate Smart Agriculture, CSA, and biodiversity conservation
	Indicator 6: Change in capacities of key government institutions for biodiversity conservation, PA management and integrated natural resource management	42% (overall score) Capacities to Generate, Access and Use Information and Knowledge: 33%	+5% (overall score) Capacities to Generate, Access and Use Information and Knowledge: Baseline +5%	+20% (overall score) Capacities to Generate, Access and Use Information and Knowledge: Baseline +20%	MOV: Updated UNDP Capacity Development Scorecard at Mid-Term and Final Evaluation Risks: Capacity building efforts in Government are undermined by

[75] Refer to documents to be developed and verified must be vetted by the Gender Specialist according to the gender responsive criteria developed

		Capacities for Strategy, Policy and Legislation development: 44% Capacities to monitor and evaluate: 33%	Capacities for Strategy, Policy and Legislation development: Baseline + 5% Capacities to monitor and evaluate: Baseline + 5%	Capacities for Strategy, Policy and Legislation development: Baseline + 15% Capacities to monitor and evaluate: Baseline + 20% Note: End of Project target to be confirmed during inception workshop	limited available financing for maintaining adequate levels of trained personnel. Assumptions: - Sampling methodology and efforts are optimal and replicated - Beneficiaries apply additional knowledge acquired
	Indicator 7: Financial sustainability of the PAs system, as indicated by the rating of the GEF TT Financial Scorecard.	60 (overall score)	+5% (overall score)	+30% (overall score)	MOV: Updated GEF TT Financial Scorecard at Mid-Term and Final Evaluation Risks: - Lack of political will impedes approval of changes identified to support enhanced financial sustainability Assumptions: Willingness by decision-makers to approve changes to support PA financial sustainability
Component 1 Outputs: 1.1 Natural resources information management system harmonized 1.2 Strengthened coherence of policy, legal and regulatory framework for INRM (ridge to reef) 1.3 Strengthened coordination and planning framework for INRM 1.4 Enhanced financial sustainability framework for Protected Areas System 1.5 Strengthened Institutional Capacities for INRM (PA, BD &SLM)					
Component 2. Establishment and effective management of new and existing PAs	Indicator 8: Change in management effectiveness of 2 terrestrial and	Central Mountain Forest Reserve: 51 Chatham Bay: 29	Central Mountain Forest Reserve: 60 Chatham Bay: 35	Central Mountain Forest Reserve: 70 Chatham Bay: 50	MOV: GEF BD METT Score. METT applied at Mid-Term and Final Evaluation

Outcome 2.1 Operational terrestrial and marine protected area estate expanded with improved management, monitoring and strengthened protection, as measured by METT scores. **Outcome 2.2** Increased PA estate with globally vulnerable or irreplaceability values under protection **Outcome 2.3** BD of known globally significance in PA estate are documented, protected, with management and monitoring, including for newly discovered species of national and global significance, including at least (4) Species Recovery and Action Plans developed with implementation of 5 initiated	1 marine PA covering 15,460 ha, as measured by the METT	Leeward Coast Marine Park: 27	Leeward Coast Marine Park: 35	Leeward Coast Marine Park: 50	Risks: Extreme climatic events and natural disasters shift management efforts to recovery and undermines the effectiveness of PA management beyond the Project implementation period. Assumptions: - Consistency in scorecard implementation - PA Agency staff use the knowledge, tools and equipment provided by the project to improve PA management
	<u>Indicator 9</u>: Number of Priority KBAs and proportion (%) of total SVG KBAs that are integrated/included in the expanded PA estate (as indicated by Cabinet Submission for their legal protection)	1 KBAs, 7% – Cumberland Forest Reserve	1 KBA, 7% – Cumberland Forest Reserve	7 KBA, 47% – Cumberland Forest Reserve – Colonarie Forest Reserve – Dalaway Forest Reserve – Kingstown Forest Reserve – La Soufrière National Park – Mount Pleasant Forest Reserve – Richmond Forest Reserve	MOV: Instruments submitted to Cabinet for approval Risks: Lack of interest from government decision makers to further protect PAs and increase the PA estate. Assumptions: - Willingness by decision makers to incorporate objectives of BD conservation and PA expansion in decision-making. - Stakeholders will buy-into and implement a strengthened institutional framework BD at the landscape scale.
	<u>Indicator 10:</u> Number of the following new marine and terrestrial PAs legally gazetted, as measured by the expansion in the coverage of the national PA estate in ha -Central Mountain Forest Reserve (13,214 ha) -Chatham Bay (63 ha, tbd) (GEF Core Indicator 1.1)	0	0	3 PAs covering at minimum 15,460 ha - Central Mountain Forest Reserve (13,214 ha) - Chatham Bay (63 ha, tbd) - Leeward Coast Marine Park (2,183 ha)	MOV: Instruments submitted to Cabinet for approval Risks: Lack of interest from government decision makers to further protect PAs and increase the PA estate. Assumptions:

	-Leeward Coast Marine Park (2,183 ha) (GEF Core Indicator 2.1)				- Willingness by decision makers to incorporate objectives of BD conservation and PA expansion in decision-making.
	<u>Indicator 11:</u> Conservation of critical habitat within the Protected Area targeted by the project: • Forest cover at 4 terrestrial PAs, as measured by # of hectares (interpretation of new/current satellite images) • Coral reef health in Marine Park site, as measured by: –Percent live hard coral cover –Number of coral recruits (< 5cm) per m^2 [76] –Rate of bleaching and disease –- Prevalence of fleshy microalgae; as measured by % substrate cover • Coverage of healthy seagrass bed, as measured by # of hectares • Health of selected reef fish populations, as measured by: –Abundance per m^2 –Species richness	TBD during Year 1 TBD during Year 1 TBD during Year 1 TBD during Year 1 TBD during Year 1 TBD during Year 1 TBD during Year 1 TBD during Year 1	No net loss (in # of hectares) No decrease No decrease No increase No increase No net loss (in # of hectares) No decrease No decrease	No net loss (in # of hectares) No decrease No decrease No increase No increase No net loss (in # of hectares) No decrease No decrease	MOV – AGGRA Monitoring Survey Reports Risks: Extreme climatic events impact areas under restoration/soil conservation measures Assumptions: - Sampling/measurements are optimal - Project initiates marine BD/ecological survey and dive / assessment / monitoring training for Yr1
Component 2 Outputs: 2.1 Output 2.1 Central Mountain Range Forest Reserve is established, demarcated and operationalized 2.2 Leeward Coast Marine Park legal establishment supported, with conservation zones demarcated operationalization initiated. 2.3 Chatham Bay Wildlife Reserve is legally gazetted, demarcated and operationalized.					
Component 3: Integrated watershed management measures in R2R setting to reduce threats to upstream	<u>Indicator 12</u>: Nutrient content, as reflected by total nitrogen (TN) in downstream watercourse	Baseline to be determined during the 1st year of the project	Baseline or < baseline	Baseline – 15%	MOV: TN measurement will follow methodology from the United States Coral Reef Task Force Watershed Partnership Initiative: Priority Ecosystem Indicators [76, 77]. TSS will be

[76] S. Holst Rice, P. Bradley, H. Slay, W. Wiltse, D. Polhemus, C. Storlazzi, T. Montgomery, P. Sturm, R. Viqueira, T. Callender, M. Curtis, and J. Dean. 2016. United States Coral Reef Task Force Watershed Partnership Initiative: Priority Ecosystem Indicators. Washington, DC. 56pp. See Annex L for method of measurement for Total Nitrogen.

[77] Sampling locations: Two (2) sampling stations will be in the upper watershed area of the Buccament watershed and river (above drinking water uptake), 2 stations in the mid-lower watershed (areas prone to flooding) and 4 stations downstream in the nearshore coastal area, 2 in coral reef areas and 2 in seagrass beds. Coastal sampling sites will also include 3 control sites out of the area of influence of the watershed rivers plume.

PA and downstream MPA/MMA **Outcome 3.1** SLM and Climate Smart Agriculture (CSA) techniques and technologies implemented by local communities in 3 upper watersheds (Buccament, Yambou and Kingstown) covering 1200 ha resulting in threats to ecosystem functions (encroachment, pollution, sedimentation) are reduced in landscapes surrounding the Central Mountain Forest Reserve and downstream coastal and marine sites **Outcome 3.2** Validated SLM practices support ridge to reef management process and provide inputs to national level INRM strategy and regulation **Outcome 3.3** Increased diversification of income in households disaggregated by gender	*and* Quantity of sediments in downstream watercourses in the Buccament watershed as measured by TSS (Total Suspended Solids - particulate matter)	Baseline to be determined during the 1st year of the project	Baseline or < baseline	Baseline – 15%	measured using standard methodology by a certified laboratory. Risks: - Extreme climatic events impact areas under restoration/soil conservation measures Assumptions: - Sampling methodology / measurements are optimal
	Indicator 13: % of farms targeted in watershed with an improved income resulting from applying enhanced CSA and SLM practices	Baseline to be determined in first year of the project	Baseline + 4% Note: TBD during inception Workshop	Baseline + 10% Note: TBD during inception Workshop	MOV: Agriculture Region Extension Officer records Risk: - Farmers perceive new techniques as non-beneficial (addressed in KAPB survey and Communication Plan, Component 4) Assumption: - Willingness by the farmers to incorporate Climate Smart Agriculture (CSA) and SLM as part of their production activities - Willingness of Extension Officers to promote new techniques to farmers
	Indicator 14: Area of land restored, disaggregated by land type (agricultural and forest) (GEF Core Indicators 3.1 & 3.2) Landscape area (ha) under improved SLM practices in productive systems in the 3 target watersheds (Bucccament, Yambourand Kingstown) (GEF Core Indicators 4.3)	0 ha 0 ha	77 ha restored including 60 ha agricultural land and 17 ha forest land 102 ha	514 ha restored including - 396 ha agricultural land and 118 ha forest land 686 ha	
Component 3 Outputs: 3.1 Improved SLM practices in 3 upper watershed landscapes in and surrounding the Central Mountain Forest Reserve 3.2 National learning centers and demonstration sites on CSA and SLM. 3.3 Sustainable livelihood programme developed					
Outcome 4: Knowledge management and M&E. **Outcome 4.1** Knowledge and experiences captured, shared and widespread adoption of CSA, SLM and biodiversity	Indicator 15: Number of lessons/experiences disseminated on experiences in the incorporation of conservation of biodiversity, SLM, and CSA	0	5	10	MOV: Project Report, media presentations Risks: Lack of willingness by stakeholders (men and women producers, resource users, community members) to share knowledge from successful

conservation practices encouraged. **Outcome 4.2** Monitoring and evaluation of project implementation, outcomes and outputs ensures project effectively reaches outlined goals and objectives.					experiences and lessons learned. Assumption: Knowledge is captured adequately by members of the PM team
	<u>Indicator 16</u>: Number of men and women who practice agriculture (commercial and consistent subsistence use) aware of the importance and benefits of biodiversity conservation and sustainable land management.	Baseline (TBD during 1st 6 months implementation)	Baseline + 10%	Baseline + 25%	Gender responsive KAPB Survey implemented Risks: Lack of willingness to participate by target user groups (men and women who practice commercial and consistent subsistence use agriculture. Assumptions: - Information is readily absorbed and appropriately utilized by the target audience (men and women who practice commercial and consistent subsistence agriculture.
Component 4 Outputs: 4.1 Technical knowledge captures experiences and lessons learned disseminated 4.2. Media products promote outreach and increased public awareness / environmental education of gender inclusive SLM, CSA and BD conservation 4.3. Monitoring and evaluation of project implementation					

VII. MONITORING AND EVALUATION (M&E) PLAN

148. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. *Supported by Component/Outcome Four: Knowledge Management and M&E, the project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.*

149. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the GEF M&E policy and other relevant GEF policies[78].

150. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Core Indicators) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.[79]

M&E Oversight and monitoring responsibilities:

151. Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

152. The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. Monitoring of the Gender Action Plan and gender considerations related in particular to women's participation in decision-making, policy development, equal access to livelihood related project benefits will be carried out The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. ESMP, gender action plan, stakeholder engagement plan etc..) occur on a regular basis.

153. Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

154. Project Implementing Partner: The Implementing Partner is responsible for providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.

155. UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan.

[78] See https://www.thegef.org/gef/policies_guidelines
[79] See https://www.thegef.org/gef/gef_agencies

Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the *independent mid-term review* and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

156. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

157. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

158. UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

159. **Audit**: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.[80]

160. **Additional GEF monitoring and reporting requirements:**

161. Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; SESP, Environmental and Social Management Plan and other safeguard requirements; project grievance mechanisms; the gender strategy; the knowledge management strategy, and other relevant strategies;
f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

162. The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser and will be approved by the Project Board.

163. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR.

[80] See guidance here: https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx

Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

164. The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

165. Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

166. GEF Focal Area Core Indicators: The following GEF Core Indicators will be used to monitor global environmental benefits. The baseline/CEO Endorsement GEF Focal Area Core Indicators – submitted as Annex B to this project document – will be updated by the Project Manager/Team (not the evaluation consultants hired to undertake the MTR or the TE) and Project Partners (Directors, Forestry Service, NPRBA, Fisheries) and shared with the mid-term review consultants and terminal evaluation consultants before the required review/evaluation missions take place. The updated GEF Core Indicators will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

167. Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser and approved by the Project Board.

168. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser and will be approved by the Project Board. The TE report will be publicly available in English on the UNDP ERC.

169. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

170. Final Report: The project's terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Mandatory GEF M&E Requirements and M&E Budget:

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget[81] (US$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	USD 5,000	3,500[82]	Within two months of project document signature
Inception Report	Project Manager	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Risk management	Project Manager Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager SLM / Monitoring Expert M&E Expert	Total USD 77,550[83]	USD 5,000 Gov't contribution / staff time	Annually before PIR
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	Total USD 8,100[84]	None	Annually
NIM Audit as per UNDP audit policies	UNDP Country Office	Total USD 20,000 (Per year: USD 4,000)	None	Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	Project Manager Communications Expert	Total USD 72,500[85].	USD 66,000 [86]	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager M&E Expert	Total USD 15,750[87]	None	On-going
Stakeholder Engagement Plan	Project Manager UNDP Country Office	Total USD 38,920[88]	None	On-going

[81] Excluding project team staff time and UNDP staff time and travel expenses.
[82] Estimated at 240 person/hours (30 persons for 1 day), venue, and equipment use.
[83] Estimated at 40% SLM Expert total time, 50% of M&E/Safeguards Expert total time & 20% of Project Manager total time.
[84] Estimated at 5% of PM total time.
[85] Estimated at 100% of Communication Expert's total time and 20% of Project Manager total time.
[86] Parallel co-financing from Min of Agriculture: Grant for Administrative and technical staff assigned and/or provide consultations to ensure the successful implementation of the Project. USD 66,000 = 5% of total USD1,326,896. Five percent (5%) is the proportion of Component 4 GEF budget total.
[87] Estimated at 50% of M&E/Safeguards Expert total time
[88] Estimated at 100% of Community Engagement Specialist total time

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget[81] (US$)		Time frame
		GEF grant	Co-financing	
Gender Action Plan	Project Manager Gender Specialist	Total USD 97,200[89]	Total USD 1,280,182[90]	On-going
Addressing environmental and social grievances	Project Manager UNDP Country Office	Total USD 8,100[91]	None	On-going
Project Board meetings	Project Board UNDP Country Office Project Manager	USD 2,000 (Per year: USD 400)	USD 5,000 (Per year: USD 1,000)[92]	At minimum annually
Supervision missions	UNDP Country Office	None[93]	None	Annually
Oversight missions	UNDP-GEF team	None[80]	None	Troubleshooting as needed
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None	None	To be determined.
Mid-term GEF Tracking Tool to be updated by	Responsible: *Director (Forestry Service, NPRBA, Fisheries)*	None	USD 700[94]	*Before mid-term review mission takes place.*
Independent Mid-term Review (MTR) and management response	*UNDP Country Office and Project team and UNDP-GEF team*	USD 30,000	USD 3,000[95]	*Between 2nd and 3rd PIR.*
GEF Core Indicators and GEF Tracking Tools to be updated	Key Government stakeholders (Forestry Service, NPRBA, Fisheries)	None	USD 700[96]	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 40,000	USD 3,000[94]	At least three months before operational closure
Translation of MTR and TE reports into English	UNDP Country Office	N/A	None	As required. GEF will only accept reports in English.
TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses		***USD 415,120***	***USD 1,367,082***	

[89] Estimated at 10% of PM total time and 100% of Project Gender Specialist's total time

[90] Parallel co-financing from Min of Agriculture: Grant for Administrative and technical staff assigned and/or provide consultations to ensure the successful implementation of the Project. USD 199,034 = 15% of total USD1,326,896 + USD 1,081,148 = 10% of balance of parallel co-financing.

[91] Estimated at 5% of PM total time.

[92] Estimated based on an estimated 100 person hours per year.

[93] The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

[94] Estimated based on 70 person hours.

[95] Estimated based on 300 person hours.

[96] Estimated based on 70 person hours.

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

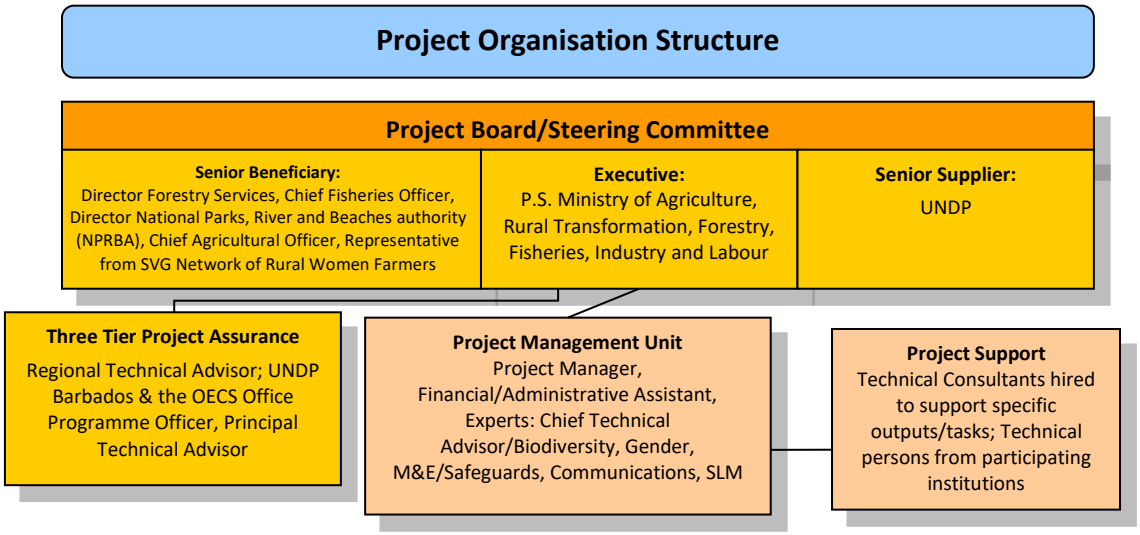
171. Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's Support to National Implementation Modality (NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of St. Vincent and Grenadines, and the Country Programme.

172. The **Implementing Partner** for this project is Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

173. The Implementing Partner is responsible for:

- Approving and signing the multiyear workplan;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

174. The project organisation structure is as follows:



175. **Project Board:** The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendations for UNDP/Implementing Partner approval of project plans and revisions, and addressing any project level grievances. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The Project Board will be comprised of Project Executive (P.S. Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour), management representatives from the Ministry of Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour (one representative from each department), 2 Statutory Bodies (CWSA, NPRBA), Project Coordiantor, representatives of key project partners (i.e. Union Island Environmental Attackers, community representative of the pilot watershed sites) and UNDP. Representatives of other stakeholders may also be included in the PSC, as deemed appropriate and necessary. The PSC will meet at least once per year to review project progress and review upcoming work plans and corresponding budgets.

Specific responsibilities of the Project Board include:

- Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
- Address project issues as raised by the project manager;
- Provide guidance on new project risks, and agree on possible countermeasures and management actions to address specific risks;
- Agree on project manager's tolerances as required;
- Review the project progress, and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;
- Appraise the annual project implementation report, including the quality assessment rating report; make recommendations for the workplan;
- Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
- Assess and decide to proceed on project changes through appropriate revisions.

176. The composition of the Project Board must include the following roles:

177. Executive: The Executive is an individual who represents ownership of the project who will chair the Project Board. This role can be held by a representative from the Government Cooperating Agency or UNDP. The Executive is: P.S. Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour.

178. The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The executive has to ensure that the project gives value for money, ensuring cost-conscious approach to the project, balancing the demands of beneficiary and suppler.

179. Specific Responsibilities: (as part of the above responsibilities for the Project Board)
- Ensure that there is a coherent project organization structure and logical set of plans;
- Set tolerances in the AWP and other plans as required for the Project Manager;
- Monitor and control the progress of the project at a strategic level;
- Ensure that risks are being tracked and mitigated as effectively as possible;
- Brief relevant stakeholders about project progress;
- Organize and chair Project Board meetings.

180. Senior Supplier: The Senior Supplier is an individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. If necessary, more than one person may be required for this role. Typically, the implementing partner, UNDP and/or donor(s) would be represented under this role. The Senior Suppler is: *UNDP*

181. Specific Responsibilities (as part of the above responsibilities for the Project Board)
- Make sure that progress towards the outputs remains consistent from the supplier perspective;
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management;
- Ensure that the supplier resources required for the project are made available;
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts.

182. Senior Beneficiary: The Senior Beneficiary is an individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries. The Senior Beneficiary role is held by a representative of the government or civil society. The Senior Beneficiary is a group of individuals: *Director Forestry Services, Chief Fisheries Officer, Director National Parks, River and Beaches authority (NPRBA), Chief Agricultural Officer, Representative from SVG Network of Rural Women Farmers.*

183. The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. The Senior Beneficiary role monitors progress against targets and quality criteria. This role may require more than one person to cover all the beneficiary interests. For the sake of effectiveness, the role should not be split between too many people.

184. Specific Responsibilities (as part of the above responsibilities for the Project Board)

- Prioritize and contribute beneficiaries' opinions on Project Board decisions on whether to implement recommendations on proposed changes;
- Specification of the Beneficiary's needs is accurate, complete and unambiguous;
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target;
- Impact of potential changes is evaluated from the beneficiary point of view;
- Risks to the beneficiaries are frequently monitored.

185. **Project Manager**: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Board. The Project Manager is responsible for day-to-day management and decision-making for the project. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

186. The Implementing Partner appoints the Project Manager, who should be different from the Implementing Partner's representative in the Project Board.

187. Specific responsibilities include:

- Provide direction and guidance to project team(s)/ responsible party (ies);
- Liaise with the Project Board to assure the overall direction and integrity of the project;
- Identify and obtain any support and advice required for the management, planning and control of the project;
- Responsible for project administration;
- Plan the activities of the project and monitor progress against the project results framework and the approved annual workplan;
- Mobilize personnel, goods and services, training and micro-capital grants to initiative activities, including drafting terms of reference and work specifications, and overseeing all contractors' work;
- Monitor events as determined in the project monitoring schedule plan/timetable, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments or reimbursement using the fund authorization and certificate of expenditures;
- Monitor financial resources and accounting to ensure the accuracy and reliability of financial reports;
- Be responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation;
- Prepare the annual workplan for the following year; and update the Atlas Project Management module if external access is made available.
- Prepare the GEF PIR and submit the final report to the Project Board;
- Based on the GEF PIR and the Project Board review, prepare the AWP for the following year.
- Ensure the mid-term review process is undertaken as per the UNDP guidance, and submit the final MTR report to the Project Board.
- Identify follow-on actions and submit them for consideration to the Project Board;
- Ensure the terminal evaluation process is undertaken as per the UNDP guidance, and submit the final TE report to the Project Board;

188. **Project Assurance**: UNDP provides a three – tier supervision, oversight and quality assurance role – funded by the GEF agency fee – involving UNDP staff in Country Offices and at regional and headquarters levels. Project Assurance must be totally

independent of the Project Management function. The quality assurance role supports the Project Board and Project Management Unit by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. This project oversight and quality assurance role is covered by the Regional Technical Advisor; UNDP Barbados & the OECS Office Programme Officer and the Principal Technical Advisor.

189. Governance role for project target groups: As part of these oversight teams, target groups will provide insights to decision-making, based on experience and knowledge. Target groups will also provide guidance to all project work, including consultants. Target groups will be vetting results and bringing the traditional knowledge to bear on the science, and local needs into decision making.

IX. FINANCIAL PLANNING AND MANAGEMENT

190. The total cost of the project is USD 15,895,477. This is financed through a GEF grant of USD 3,757,102 and USD 12,138,375 in parallel co-financing. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

191. Parallel co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows (further detail for each co-financing source is provided in Annex O. Parallel Co-financing):

Co-financing source	Co-financing type	Co-financing amount	Planned Activities/Outputs	Risks	Risk Mitigation Measures
Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour	*Grant*	*1,900,896*	All project components/outputs	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
	Loan	*1,856,964*	All project components/outputs	*Low*	
	In-kind.	*290,000*	All project components/outputs	*Medium, depending on annual budgeting and effective allocation of funds to the institution*	
Ministry of Finance, Economic Planning, Sustainable Development and Information Technology	*Loans*	*7,800,000*	Components 1, 3 and 4	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
Basic Needs Trust Fund Programme	*Loan*	*225,478*	All project components/outputs	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
St Vincent and the Grenadines Preservation Fund	*Grant*	*65,037*	Components 1 and 2	*Low*	The UNDP Country Office will monitor the co-financing

					contributions to the project

192. UNDP Direct Project Services as requested by Government (if any): The UNDP, as International Agency for this project, will provide project management cycle services for the project as defined by the GEF Council. In addition, the Government of St Vincent and the Grenadines may request UNDP direct services for specific projects, according to its policies and convenience. The UNDP and the Government of SVG acknowledge and agree that those services are not mandatory and will be provided only upon Government request. If requested the services would follow the UNDP policies on the recovery of direct costs. These services (and their costs) are specified in the Agreement (Annex J). As is determined by the GEF Council requirements, these service costs will be assigned as Project Management Cost, identified in the project budget.

193. Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the project board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team to ensure accurate reporting to the GEF: a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

194. Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

195. Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

196. Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP.[97] On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

197. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

198. Transfer or disposal of assets: In consultation with the NIM Implementing Partner and other parties of the project, UNDP programme manager (UNDP Resident Representative) is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project. In all cases of transfer, a transfer document must be prepared and kept on file[98].

199. Financial completion: The project will be financially closed when the following conditions have been met: a) The project is operationally completed or has been cancelled; b) The Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

200. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

[97] see https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx

[98] See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

IX. TOTAL BUDGET AND WORK PLAN

Total Budget and work plan			
Atlas Proposal or Award ID:	00097455	Atlas Primary Output Project ID:	00101171
Atlas Proposal or Award Title:	Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach		
Atlas Business Unit	BRB10		
Atlas Primary Output Project Title	Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach		
UNDP-GEF PIMS No.	5862		
Executing agency	Ministry of Agriculture, Rural Transformation, Forestry, Fisheries, Industry and Labour		

	Responsible Party/ (Atlas Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Total (USD)	See Budget Note:
COMPONENT / OUTCOME 1:		**62000**	**GEF**	71200	International Consultants	0	54,000	49,000	0	0	103,000	*1*
				71300	Local Consultants	32,000	47,500	4,000	1,000	8,500	93,000	*2*
				71400	Contractual Services – Individuals	140,357	113,667	41,667	18,667	14,332	328,690	*3*
				71600	Travel	2,000	8,000	8,000	2,000	2,000	22,000	*4*
				72100	Contractual Services-Companies	0	100,000	0	0	0	100,000	*5*
				72200	Equipment and Furniture	22,600	40,000	0	0	0	62,600	*6*
				72800	Information Technology Equipmt	15,500	110,000	0	0	14,000	139,500	*7*
				72300	Materials & Goods	0	20,000	0	0	0	20,000	*8*
				74500	Miscellaneous Expenses	1,250	1,250	1,250	1,250	758	5,758	*9*
				75700	Training, Workshops and Confer	9,000	11,000	0	0	0	20,000	*10*
					Total Outcome 1	222,707	505,417	103,917	22,917	39,590	**894,548**	
COMPONENT / OUTCOME 2:		**62000**	**GEF**	71200	International Consultants	0	31,000	36,000	10,000	0	**77,000**	*11*
				71300	Local Consultants	28,650	79,550	82,000	38,500	14,000	**242,700**	*12*
				71400	Contractual Services – Individuals	35,277	65,277	55,277	25,277	15,392	**196,500**	*13*
				71600	Travel	3,689	7,689	7,689	3,689	2844	**25,600**	*14*

				72100	Contractual Services-Companies	90,000	183,000	68,000	60,000	0	**401,000**	*15*
				72200	Equipment and Furniture	69,000	111,200	1,500	1,500	1,000	**184,200**	*16*
				72800	Information Technology Equipmt	4100	0	0	0	0	**4,100**	*17*
				72300	Materials & Goods	20,000	27,300	53,500	5,000	2,000	**107,800**	*18*
				74500	Miscellaneous Expenses	2,000	2,000	2,000	1,000	1,067	**8,067**	*19*
				75700	Training, Workshops and Confer	2,400	3,000	0	0	0	**5,400**	*20*
					Total Outcome 2	255,116	510,016	305,966	144,966	36,303	**1,252,367**	
COMPONENT / OUTCOME 3:		**62000**	**GEF**	71300	Local Consultants	16,000	51,500	52,500	44,000	8,900	**172,900**	*21*
				71400	Contractual Services – Individuals	34,489	116,489	113,489	38,489	24,044	**327,000**	*22*
				71600	Travel	2,000	3,000	3,000	3,000	2,000	**13,000**	*23*
				72100	Contractual Services-Companies	0	0	25,000	0	0	**25,000**	*24*
				72200	Equipment and Furniture	130,000	220,300	113,500	0	0	**463,800**	*25*
				72600	Grants	0	50,000	70,000	40,500		**160,500**	*26*
				74200	Audio Visual&Print Prod Costs	0	15,000	15,000	10,000	0	**40,000**	*27*
				74500	Miscellaneous Expenses	1,000	1,000	1,500	1,500	777	**5,777**	*28*
				75700	Training, Workshops and Confer	0	4,000	4,600	2,000	0	**10,600**	*29*
					Total Outcome 3	183,489	461,289	398,589	139,489	35,721	**1,218,577**	
COMPONENT / OUTCOME 4:		**62000**	**GEF**	71200	International Consultants	0	14,000	0	0	19,200	**33,200**	*30*
				71400	Contractual Services – Individuals	22,754	22,754	22,754	22,754	10,184	**101,200**	*31*
				71600	Travel	3,000	8,000	3,000	3,000	9,300	**26,300**	*32*
				74100	Professional Services	4,000	4,000	4,000	4,000	4,000	**20,000**	*33*
				74200	Audio Visual &Print Prod Costs	6,000	4,000	4,000	4,000	2,000	**20,000**	*34*

				75700	Training, Workshops and Confer	5,400	1,400	1,400	1,400	2,400	**12,000**	*35*
					Total Outcome 4	**41,154**	**54,154**	**35,154**	**35,154**	**47,084**	**212,700**	
Project MANAGEMENT UNIT [1]	**DETC**	**62000**	**GEF**	71400	Contractual Services – Individuals	23,733	23,733	23,733	23,733	11,868	**106,800**	*36*
				71600	Travel	1,200	1,200	1,200	1,200	400	**5,200**	*37*
				72200	Equipment and Furniture	2,000	0	0	0	0	**2,000**	*38*
				72500	Supplies	2,000				0	**2,000**	*39*
				72800	IT Equipment	5,550	0	0	0	0	**5,550**	*40*
				74500	Miscellaneous Expenses	500	500	500	500	0	**2,000**	*41*
				74596	Direct Project Costs	11,525	12,525	12,525	12,525	6,260	**55,360**	*42*
					Total Management	**46,508**	**37,958**	**37,958**	**37,958**	**18,528**	**178,910**	
					PROJECT TOTAL	**748,974**	**1,568,834**	**881,584**	**380,484**	**177,226**	**3,757,102**	

Summary of Funds: [99]

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total (USD)
GEF	748,974	1,568,834	881,584	380,484	177,226	3,757,102
Recipient Government (Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour)	806,936	1,690,244	949,809	409,929	190,942	4,047,860
Recipient Government (Ministry of Finance, Economic Planning, Sustainable Development and Information Technology)	1,554,921	3,257,006	1,830,229	789,911	367,933	7,800,000
Basic Needs Trust Fund Programme	44,949	94,152	52,907	22,834	10,636	225,478
St Vincent and the Grenadines Preservation Fund	12,965	27,157	15,261	6,586	3,068	65,037
TOTAL	3,168,745	6,637,393	3,729,790	1,609,744	749,805	**15,895,477**

[99] Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...

Budget note	Comments
Component 1. Strengthened institutional framework for Protected Areas, Ecosystem Conservation and Sustainable Land Use	
1	a) Forest Management/Natural Resource Policy Expert to develop Forest Policy through extensive stakeholder participatory process. Total cost: $36,000 during Years 2 & 3. (Output 1.2). b) Protected Area Planning Expert for updating SVG's PASP. Total cost: $36,000 during Years 2 & 3 (Output 1.2). c) Sustainable Finance Consultant to review and assess the existing legal and institutional conditions for sustainable financing for PAs, develop a PA System Business (Sustainable Financing) Plan, develop implementation plan, update the Financial Sustainability Scorecard to include needed data for baseline, and support initial implementation of 1 mechanism identified. Total Cost: $31,000 during Years 2 to 3. (Output 1.4)
2	a) Data Systems Design & Management Expert to design and develop inter-departmental Biodiversity and Land Use Database and monitoring systems/tracking tools for LD/BD for multi-departmental use. Total cost: $40,000 during Years 1 & 2. (Output 1.1) b) Legal Consultant to carry out consultations and draft data-sharing agreements to operationalize an information management and monitoring system for SLM, CSA, and biodiversity conservation. Total cost: $20,000 during Year 2 (Output 1.1). c) Satellite image Interpretation Expert to develop baseline land cover maps and end of project map to document change. Total cost: $16,000 during Years1 and 5. (Output 1.1) d) Outreach/Interpretation Design Specialist to design interpretation and outreach materials for Biodiversity Interpretation Center that support Project, BD, PA, SLM awareness, incorporating outputs of KAPB study. Total cost: $10,000 during Years 1 to 3. (all outputs in component) e) Community Engagement Specialist to support stakeholder consultations, workshops and meetings, with support from Project Gender Specialist to engage with women, women leaders and representatives of women's organizations, and to ensure women participation and to support costs for differentiated spaces for women consultations including transportations costs and possible child care. Total cost $7,000 during Years 1 to 5. (Outputs 1.2 - 1.4).
3	a) Gender Equality and Socio-economic Development expert to conduct a gender responsive socio-economic analysis of the PAs to inform the expansions and ensure vulnerable groups are not negatively impacted, with data collection and ensuring gender data and gender responsive data is input into the project databases for use by stakeholders in policy formulation and planning. Total cost: $29,000 during Year 1. (Output 1.2) b) Communications/Knowledge Management Expert to design and conduct a gender responsive KAPB surveys as a precursor to a country-specific communication strategy and to monitor change, with report preparation, and to support communication and awareness raising activities. $2500/month for 8 months over 4.5 years. Total cost: $20,000 during Years 1 and 3. (Output 1.2). c) Legal Consultant to develop and review policies/legislations/regulations to ID gaps/needs, build consensus on priority legislation/regulations to update, draft legislation/regulations, carry out consultations / workshops and incorporate a gender analysis in legal review Total cost: $60,000 during Years 1 & 2. (Output 1.2) d) Capacity Building Specialist (with INRM / PA expertise) to carry out capacity needs assessment, 5-10-year capacity development plan and design and implement a training program for staff from the relevant agencies in biodiversity conservation, land use management, with collaboration with SVG Technical College / Tertiary institutions and links with other training programs. Total cost: $55,000 during Years 1 & 2 (Output 1.5). e) Chief Technical Advisor/Biodiversity Expert to provide overall Project technical support and to ensure biodiversity is mainstreamed into Component activities and BD considerations are incorporated into Project decision making. Individual for approx. 63 days. Total cost: $46,690 during Years 1 to 5 (all outputs in component). f) Project Gender Specialist to support implementation and monitoring of gender mainstreaming (Gender Action Plan), conduct a workshop on gender data informing policy and planning and the involvement of all stakeholders, design and develop gender responsive and gender data collection tools for project baselines to ensure the project activities are gender responsive. $3000/month for 10 months over 3 years. Total cost: $30,000 during Years 1 to 3. (all outputs in component) g) Project Manager (25%): Management support for systemic and institutional capacity for integrated landscape management at national level. $3,000/month for 13 months over 4.5 years. Total cost: $39,000 during Years 1 to 5 (all outputs in component). h) SLM/Monitoring Expert will: 1) develop monitoring and tracking programmes, protocols and guidelines for all data collection systems, incorporating SMART indicators, and provide training and department support for their implementation; 2) develop Soil Conservation Monitoring Programme and support its implementation and develop baseline; 3) assess and develop a comprehensive programme to provide ongoing national water quality testing services and to develop data collection system and monitoring protocols

	for measures implemented, addressing gaps identified and developing baseline freshwater and saltwater quality; 4) provide technical support for Forest Policy development. 14 months @ $3500/month over 4.5 years. Total cost: 49,000 during Years 1 to 5. (Outputs 1.1-1.2).
4	a) Travel costs for Forest Management/Natural Resource Policy Expert to develop Forest Policy. Total cost: $4,000 during Years 2 & 3. (Output 1.2). b) Travel costs for Protected Area Planning Expert to update SVG's PASP. Total cost: $4,000 during Years 2 & 3 (Output 1.2). c) Travel cost for Sustainable Finance Consultant to review and assess the existing legal and institutional conditions for sustainable financing for PAs, develop a PA System Business (Sustainable Financing) Plan, develop implementation plan, update the Financial Sustainability Scorecard to include needed data for baseline, and support initial implementation of 1 mechanism identified. Total Cost: $4,000 during Years 2 & 3. (Output 1.4) d) Travel costs related to the development of a systemic and institutional capacity for integrated landscape management at national level. Total cost: $10,000 during years 1 to 5 (all outputs in component).
5	Local construction company to renovate/upgrade existing storage building at the Forestry Services compound to service as BD Interpretation Center/Visitor Center for Project activities and Forestry Services, NPRBA and Fisheries BD/SLM/PA/INRM activities with facilities for visitor use, office space. Total cost: $100,000 during Year 2. (Output 1.1)
6	a) Freshwater quality testing equipment - Lab: CWSA-2 Benchtop Spectrophotometer ($10,600); Field: SWCA & CWSA-3 Portable Spectrophotometer ($7,800), reagents ($1,900), with maintenance agreements included. Saltwater: Portable testing ($1600). GPS (2, SWCA): $700. Total cost: $22,600 during Year 1. (Output 1.2) b) Office equipment for Biodiversity Interpretation Center (desk, chairs, computers, printer, plant storage/cataloguing equipment, projector, etc.) Total cost: $40,000 during Year 2. (Output 1.1)
7	a) Desktop equipment for CMS for 6 departments (Forestry, Physical Planning, Agriculture Dept, Fisheries Division, National Parks, Forestry/BD Interpretation Center) for GIS / data management (of which 2 departments - Physical Planning, Forestry - will require specifications for advanced satellite image classification and interpretation capabilities, and includes 2 map printers, 6 ArcGIS ProAdvanced licenses, Microsoft software licenses, 2 servers and backups, and 1 field laptop for data entry (Forestry Services). Total cost: 110,000 during Year 2. (Output 1.2) b) Field Laptop/Toughbook for Soil and Water Conservation Unit for field data entry. Total cost: $1,500. during Year 1. (Output 1.2) c) Satellite images/aerial photography to assess changes in land use/land cover in the project prioritized protected areas and landscapes. Total cost: $28,000 during Years 1 and 5. (Output 1.1 - 1.2)
8	Interpretation/education materials and displays for Biodiversity Interpretation Center to support Project, BD, PA, SLM efforts. Total cost: $20,000 during Year 2. (Output 1.1)
9	Incidental expenses related to building a systemic and institutional capacity for integrated landscape management at national level. Total cost: $5,758 during Years 1-5 (all outputs in component).
10	a) Workshops and consultations for legal review process, including extensive stakeholder participatory process, ensuring participation of women. Total cost: $4,000 during Years 1 & 2. (Output 1.2) b) Workshops and consultations for NEAB reactivation and / or Technical Advisory Committee, with technical support. Total cost: $4,000 during Year 2. (Output 1.2) c) Workshops and consultations to develop PA System Plan participatory through extensive stakeholder process, ensuring participation of women. Total cost: $6,000 during Years 1 & 2. (Output 1.2) d) Workshops and consultations to develop Forest Policy through extensive stakeholder participatory process, ensuring participation of women. Total cost: $6,000 during Years 1 & 2. (Output 1.2)
Component 2: Establishment and effective management of new and existing PAs	
11	a) IAS Expert to develop IAS control plan, protocols, provide training and initiate implementation with Field Assistants to support the removal of IAS in prioritized locations to support species recovery of 5 species of global significance (4 in CMFR, 1 in Chatham Bay). Total cost: $26,000 during Years 2-4. (Outputs 2.1 and 2.3). b) PA Financial Expert to develop 2 site business/operational plans, including all needs and gaps assessed (for CMFR and Chatham Bay), and a financing needs and gap assessment for the LCMP with recommendations for addressing gaps, including for Financial Scorecard. Total cost: $ 51,000 during Years 2 and 3. (Outputs 2.1-2.3)
12	a) GIS Specialist to support PA boundary delineation (Year 1 - CMFR, $7,500, Year 2 - LCMP, $7500), georeferencing for ground-truthing by Forestry Services. Total cost: $15,000 during Years 1 & 3. (Output 2.1) b) Legal Consultant to support drafting of Cabinet submissions / documentation for gazette of CMFR, LCMP & Chatham Bay, drafting co-management arrangements for UIEA and/or MOUs. Total cost: $20,000 during Year 2 & 3. (Outputs 2.1-2.3) c) Community Engagement Specialist for outreach to communities to 1) to support stakeholder consultations, workshops and meetings, with support from Project Gender Specialist to engage with women, women leaders and representatives of women's organizations, and to ensure women participation and to support costs for differentiated

	spaces for women consultations including transportations costs and possible child care (Outputs 2.1 & 2.2), and 2) for Chatham Bay, to train Youth Empowerment Services and Union Island Environmental Attackers staff to continue community outreach activities, and to provide training and tools for women local artisans and small enterprises to develop livelihoods in UI that promote the UI Gecko (Output 2.3). Approx. 68 days at 280/day. Total cost: $19,040 during Year 2 to 4. (all outputs in Component). d) PA Enforcement Specialist to carry out enforcement training for CMFR and Chatham Bay for Forestry Services staff and IUEA for 1 week (class and field), including review of laws and regulations. Total Cost: $4,960 during Year 2. (Output 2.1 & 2.3). e) Field Assistants (2) to support implementation of IAS control/removal measures prioritized locations to support species recovery of 5 species of global significance (CMFR, Chatham Bay). 2 @ 450/month for 30 months. Total cost: $27,000 during Years 3- 5. (Outputs 2.1 and 2.3). f) Field Assistance (4) to support forestry staff for boundary delineation & demarcation. Total cost: 4 @ 450/month for 4 months. $7,200 during Year 2. (Output 2.1) g) Field Assistants (2) to support BD and Ecological Assessment/Inventory of the CMFR. 2 persons for 7 months @ 450/month each. Total cost: $6,300 during Years 1 & 2. (Output 2.1) h) Field Assistance (4) for field support for species census (*Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi, Amazona guildingii*) and research on habitat and movement patterns for *Amazona guildingii*. 4 persons for 4 months @ 450/month each. Total cost: $7,200 during Year 2. (Output 2.1) j) Forest Rangers at Chatham Bay to address poaching of *Gonatodes daudini* (6 Forest Rangers @ 500/month each for 36 months). Total cost: $108,000 during Years 1-4. (Output 2.3) k) Partner with private dive company (Serenity Dive) currently removing and recording lionfish control efforts, including record keeping. Support lionfish control and monitoring, outreach activities, including fish fry and other outreach. Total cost: $20,000 during Years 2 - 5. (Output 2.2) l) Outreach/Interpretation Design Specialist to design interpretation and outreach materials to support gecko conservation efforts. Total cost: $8,000 during Year 3. (Output 2.3)
13	a) PA Planning Expert to develop two management plans for proposed PAs in the CMFR and Chatham Bay that include biodiversity conservation, ecosystem services and species of global significance. Total cost: $50,000 during Years 2 and 3 (Output 2.1 & 2.3). b) Gecko/Herpetofauna Expert/Biologist to carry out baseline gecko census to ID abundance and distribution, habitat study, species movement patterns, with on-site training for Forestry/UIEA to repeat, with protocols developed. ID predators/develop 5-year control plan. Train field support/UIEA/Forestry staff in IAS, BD, Endangered species, other. Include BD training. Total cost: Total cost: $30,000 during Year 1 and 2. (Output 2.3) c) Communications/Knowledge Management Expert: Communication and awareness-raising activities and documentation and systematization of lessons learnt and best practices. $2500/month for 5 months. Total cost: $12,500 during Years 1 to 5. (Outputs 4.1- 4.2) d) Project Gender Specialist to support and monitoring of gender mainstreaming (Gender Action Plan) and provide support to community engagement specialist in engaging women in stakeholder consultations, project activities and as potential project beneficiaries. $3000/month for 5 months. Total cost: $15,000 during Years 1-5 (Outputs 1.2 – 1.4) e) CTA/BD expert to support BD and the effective expansion of the PA estate, and to support boundary georeferencing/delineation, development of monitoring and tracking programmes (terrestrial/marine assessment, census data), SMART indicators for key project indicators and data collecting protocols. Includes training and department support. Individual for approx. 70 days. Total cost: $50,000 during Years 1-5. (Outputs 2.1-2.3) f) Project Manager (25%): Management support for biodiversity and protected area improved effectiveness of expanded PA estate. $3,000/month for 13 months over 4.5 years. Total cost: $39,000 during Years 1 to 5. (all outputs in Component).
14	a) Travel to Union Island by Forestry Staff and Consultants to implement / oversee Project activities for Chatham Bay/UI Gecko. Total cost: $7,600. b) Travel for IAS Expert to develop IAS control plan, protocols, provide training and initiate implementation with Field Assistants to support the removal of IAS in prioritized locations to support species recovery of 5 species of global significance (4 in CMFR, 1 in Chatham Bay). Total cost: $4000 during Years 2-4. (Outputs 2.1 and 2.3). c) Travel for PA Financial Expert to develop 2 site business/operational plans, including all needs and gaps assessed (for CMFR and Chatham Bay), and a financing needs and gap assessment for the LCMP with recommendations for addressing gaps, including for Financial Scorecard. Total cost: $ 4,000 during Years 2 and 3. (Outputs 2.1-2.3) d) Travel costs related to the establishment and effective management of new and existing PAs. Total cost: $10,000 during years 1 to 5 (all outputs in component).
15	a) Three (3) Endangered species experts for *Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi* to 1) guide species census with Forestry Services staff and develop Species Recovery and Action Plans (3 plans @ $22,000 each) and 2) 1 Endangered species expert for *Amazona guildingii* to support species census with Forestry Services staff, develop Species Recovery and Action Plan, and conduct research on habitat and movement patterns ($35,000). Total cost: $101,000 during Years 2 & 3. (Output 2.1). b) Marine biologist and marine engineer 1) to identify conservation zones (based on BD assessment), carry out consultations, develop conservation zoning plan and guidelines through a gender inclusive participatory process and 2) install buoys to demarcate conservation zones (including cost of demarcation buoys and installation of 40 buoys @ $1000). Total cost: $80,000 during Year 3 & 4. (Output 2.2).

	c) BD/Ecological Assessment / Inventory to implement baseline biodiversity and ecological assessment / inventory of the CMFR and Buccament watershed - develop monitoring programs, conduct baseline studies to understand current population, distribution of key IAS (mongoose, rats, tbd) in prioritized areas and field training of BD/Ecological assessment techniques. Total cost: $110,000 during Years 1 and 2. (Output 2.1) d) Marine Biodiversity Ecological Company to conduct reef and BD assessment (consultant provide own gear and monitoring requirement, Including baseline assessment of coral reef health indicators and development of monitoring programme, data sets and habitat maps. Provide AGRAA training for 4 staff for monitoring and assessment. Total cost: $110,000 during Years 1 and 2. (Output 2.2)
16	a) Traps, bait, safety gear for Field Assistants for implementation of IAS control/removal measures prioritized locations in CMFR to support species recovery of 4 species of global significance. Total cost: $15,000 during Year 2. (Outputs 2.1 and 2.3). b) One single cab pick-up vehicle (hybrid for consideration) for Forestry Services for rugged terrain to monitor forest borders. Total cost: $40,000. Year 1. (Outputs 2.1, 3.2) - check drone tech in C1 c) Equipment to implement BD and Ecological Assessment/Inventory of the CMFR. Total cost: $20,000 during Year 1. (Output 2.1) d) Field Equipment for PA monitoring and to conduct species census for Amazona guildingii for 25 watchpoints over 5 sectors (binoculars-25, field radios, GPS, flashlights, cameras, sleeping gear/tents, enforcement/safety equipment, boots/vests, misc.). Total cost: $39,200 during Year 2. (Output 2.1) e) Dive equipment for 6 divers for Fisheries Division (BCD, Gloves, regulators, tanks, wet suits, mask/snorkel/fins, etc.), underwater cameras w video, 8 handheld GPS. Total cost: $9,000 during Year 1. (Output 2.2) f) Cumberland field station (NPRBA): building upgrade &, furniture= $9,000; equipment (office desktop computer, field laptop, printer, surge protectors, projector & screen, transformer, etc.) = $15,000; Fisheries office support (office desktop, printer, surge protectors, transformer, etc.) = $6,000. Total $30,000 during Year 1 & 2. (Output 2.2) g) Equipment to carry out invasive species control measures for Chatham Bay (traps, bait, gloves, protective gear). Total cost: 13,000 during Year 2-5. (Output 2.3) h) Equipment for UIEA for Chatham Bay site management (Office: printer, projector, projector screen, basic office upgrade/furniture – cost: $2,000; Field: ATV 6 radios with a base station, 3 GPS, 6 guard/enforcement uniforms/safety equipment - cost: 16,000). Total cost: $18,000 during Year 2. (Output 2.3)
17	a) Field laptops for boundary demarcation, species census and field data input. Total cost: $2,500 during Year 1. (Output 2.1, 2.1) b) Desktop computer for UIEA office for Chatham Bay site management. Total cost: $1,600 during Year 1. (Output 2.3)
18	a) Materials to support Forestry Services for site (CMFR, Cost: $20,000, Year 1 & Chatham Bay, Cost: $10,000, Year 3) demarcation and boundary signage. Total cost: 30,000 during Years 1 & 3. (Output 2.3) b) Materials and other support for turtle conservation efforts by SVG Sea Turtle Conservation Program, including materials for outreach, training, and beach monitoring support, with assistance from CTA/BD Expert. Total Cost: $17,000 during Years 2 to 5. (Output 2.2) c) Materials to support Union Island Environmental Attackers implementation of Sustainable Finance Mechanism to support co-management. Total cost: $48,800 during Years 2 and 3. (Output 2.3) d) Outreach materials and displays for Gecko conservation (brochures printed materials, environmental outreach materials, site/trail interpretation/signage, site and species management, UIEA office sign/gecko logo, UI&SVG Int'l airport display, etc.). Total cost: $12,000 during Year 3. (Output 2.3)
19	Incidental expenses related to building a systemic and institutional capacity for integrated landscape management at national level. Total cost: $8,067 during years 1 to 5 (all outputs in component).
20	a) Meetings and workshops to support Community Engagement Specialist for BD assessment (outreach), management planning (CMFR, Chatham Bay) and community / participatory zoning (LCMP). Includes child care and reimbursement of transportation costs to ensure maximum participation of women. Total Cost: $3,000 during Year 2. (Output 2.1- 2.3). b) Dive training to provide 6 open water certifications for Fisheries Division staff. Total cost: $2,400 during Year 1. (Output 2.2)
Component 3. Integrated watershed management measures in R2R setting to reduce threats to upstream PA and downstream MPA/MMA	
21	a) Forester to support Forestry Services and supervise plantation management and reforestation activities and Field Assistants. Total cost: $15,000 during Yrs. 2-3. (Output 3.1). b) Field Assistants (2) for 4.5 years @ $450/month to help the Forestry Services with plantation management, reforestation, soil conservation in the 3 upper watersheds in the CMFR, and to support CSA and agroforestry demonstration at Montreal, trail maintenance. Total cost: 48,600 during Years 1-5. (Output 3.1) c) Field Assistants (1) for 4.5 years @ $450/month to help the Soil and Water Conservation Unit implement soil conservation measures, and for testing water quality (chemical, nutrient, and sedimentation) from streams to determine the baseline water quality and ongoing monitoring in the Project R2R site (Buccament). Total cost: $24,300 during Years 1-5. (Output 3.1 & 3.2)

	d) Micro-enterprise/agricultural Post-production Specialist to: 1) Review and assess previous agriculture micro-enterprise / IGAs and identify lessons learned to support identification and feasibility of livelihood activities; 2) Support development of partnerships for agro-processing for cluster initiatives for CSA value chain and beekeeping / honey (production, post-production and marketing) and women owned businesses, 3) Provide guidance in the development of management, business and sustainability plans for each cluster facility (including SOPs), 4) Assess capacity needs and provide small business trainings for Project beneficiaries, communities, producers and agro-processors, including capacity building exercises to support women in sustainable livelihood and small businesses, 5) provide technical design and implementation of 2 shared container based cluster facilities (1 for CSA / SLM related agroprocessing, 1 for Beekeepers Association honey production), including identification of needed/prioritized equipment and health and safety standards. Total costs: $50,000 during Years 2-4. (Output 3.3) e) Graphic/Interpretation Design Specialist to design printed materials (brochures, posters, technical packets, guides, etc.) to support public education, awareness and outreach for farmers and communities in the 3 target watersheds regarding SLM / CSA in general, gender issues, including Montreal interpretation building and trail and all signage and information packages for upgraded Propagation Centers / National Learning Center. Total cost: 22,000 during Years 2-4. (Outputs 3.1-3.3) f) Community Engagement Specialist for outreach to rural communities to engage re watershed management planning and activities, development of intersectoral management committee, outreach (Buccament Watershed Mgt and Yambou/Kingstown stakeholder engagement in CSA/SLM activities), and sustainable livelihood initiatives, supported by Project Gender specialist & ensuring participation of women. Total Cost: $13,000 during Years 2-4 (Output 3.1-3.3).
22	a) CSA Expert to 1) develop and demonstrate 2 model farms at Prop Centers in collaboration with communities and farmers, using materials available to farmers, with enhanced techniques and low cost innovations demonstrated, 2) provide technical guidance on Propagation Center upgrade for climate resilient agriculture practices, 3) develop a capacity needs assessment, capacity development plan, and developing / implementing a training programme (workshop, field/farm visit, demonstration sites) for MARFFIL Extension Officers, farmers and community groups for the implementation of CSA activities in the 3 target watersheds (i.e. propagation techniques, maintenance, and documentation). Total cost: $54,000 during Years 2-4. (Output 3.2) b) Agricultural engineer to design and support procurement and installation of upgrade measures (shade structures, rain water harvesting and water management structures, irrigation, fencing, compost facility, greenhouse, solar water pump, tree and plant seedlings production, to be defined by MARFFIL during Project inception) for 2 National Propagation Centers (Wallilabou, Dumbarton), and to develop standard operating procedures and management plan with provision of related capacity building. Total cost: $30,000 during Years 2-3 (Output 3.2). c) Watershed Management Consultant to develop 1 integrated watershed management plans (Buccament), including detailed environmental characterizations and outputs of socio-economic / livelihood assessment, incorporating gender / women considerations/needs, developing and working with the intersectoral watershed management committee, supported by Community Engagement Specialist and Project Gender Expert to ensure extensive community engagement and outreach. Total cost: $45,500 during Years 2 & 3 (Output 3.1). d) Communications/Knowledge Management Expert to support development of i) public education, awareness and outreach for farmers and communities in the 3 target watersheds regarding SLM / CSA in general, gender issues, incorporating outputs of KAPB study, and conducting awareness training for women regarding SLM /CSA, and with support of Project Gender Specialist including differentiated spaces for women consultations including transportations costs and possible child care, 2) development of outreach materials for CSA and SLM activities including for National Biodiversity Interpretation Center (in collaboration with Graphic design/Interpretation Specialist), 3) and 4) documentation / systematization of lessons learnt and best practices. $2500/month for 8 months. Total cost: $20,000 during Years 1-3. (Outputs 4.1- 4.2) e) SLM/Monitoring Expert (with CSA expertise) to provide technical support and supervision for 1) SLM activities in 3 target upper watersheds (plantation management, soil conservation, reforestation), 2) operations of the National Propagation Centers (Wallilabou, Dumbarton), 3) support CSA demonstration and propagation activities (field and propagation station), 4) develop freshwater water quality (minerals and sedimentation) and saltwater quality and nearshore sedimentation baseline for Buccament watershed and nearshore coastal waters/coral reef (in collaboration with Fisheries Division), with monitoring system to measure effectiveness of efforts, 5) support implementation of soil conservation measures, establish soil conservation baseline (analysis of existing data and collecting baseline data) with monitoring system to measure effectiveness of efforts, 6) develop of national Soil Conservation Monitoring Programme , 7) Develop riverbank setback criteria and guidelines. 17 months @ $3500/month over 4.5 years. Total cost: $59,500 during Years 1 to 5 (Outputs 3.1 - 3.3). f) Project Gender Specialist. Support and monitoring of gender mainstreaming (Gender Action Plan). $3000/month for 5 months. Total cost: $15,000 during years 1 to 5 (all outputs in component). g) Project Manager (20%): Management support for CSA & SLM integrated landscape management at national level. $3,000/month for 11 months over 4.5 years. Total cost: $33,000 during Years 1 to 5; (all outputs in component). h) Agricultural market specialist to: 1) conduct a gender responsive market analysis of the value chain of selected crops and CSA; 2) identify micro-finance opportunities for small and micro-enterprise development, including producers, post-production and other small sustainable livelihoods initiatives; 3) provide support and training for market access and

	production requirements and standards (local and / or regional, tbd); and 4) Provide guidelines and training for micro-finance grant management and application review. Total cost: $30,000 during Years 2 & 3. (Output 3.2 & 3.2) i) CTA/BD expert to support BD mainstreaming in the integrated landscape, and to support reforestation, soil conservation and plantation management to support GEBs, and BD integrated into the development of monitoring and tracking programmes for SLM, including SMART indicators for key project indicators and data collecting protocols. Individual for approx. 55 days. Total cost: $40,000 during Years 1 to 5. (Outputs 2.1-2.3)
23	a) Travel cost for moving farmers to demonstration sites hosting training workshops. Activity lead by staff at the stations and extension officers. Total cost: $3000 during Years 2 to 4. (Output 3.2-3.3) b) Travel costs related to the Component 3. Total cost: $10,000 during years 1 to 5 (all outputs in component).
24	Local Company to construct visitor outbuilding at Montreal using trees harvested from plantation management activities to display interpretation of SLM/BD, including supporting labour costs. Total cost $25,000 during Year 3. (Output 3.2)
25	a) Field equipment to carry out plantation management activities (chainsaws, bandsaws, shredders, log hauling, climbing gear, safety equipment, other) and native species reforestation. Total cost: $79,400 during Year 2. (Output 3.1) b) Equipment to implement soil conservation measures in the 3 upper watersheds in the CMFR. Field equipment (GPS, tools, sampling equipment, other) - $13,400 and 4-ton 4WD dump truck for Forestry Services and SWCU to implement SLM measures (reforestation, plantation management) -$90,000. Total cost: $103,400 during Years 1 & 2. (Output 3.1). c) Field equipment to implement reforestation activities in the 3 upper watersheds in the CMFR, including for seedling propagation (potting trays, diggers, sprayers, pruners, shovels, field safety equipment, gear, other), site clearing, fly nursery/irrigation, other. Total cost: $20,000 during Year 1. (Output 3.1) d) Farm / CSA equipment develop and demonstrate 2 model farms at Prop Centers in collaboration with communities and farmers, using materials commonly available to farmers, with enhanced techniques and low-cost innovations demonstrated. Total cost: 14,000 during Year 2. (Output 3.2) e) Two (2) containers (agroprocessing, honey production) equipped with utilities (water, sewage, electricity), with energy efficiency incorporated, with basic agro-processing / honey production equipment based on priority needs identified, including packaging, labeling and compositing equipment. Container equipped: 2 @ $55,000/each. Total Cost: $110,000 during Years 2 & 3. (Output 3.3) f) Field / farm equipment for Extension Services to provide enhanced technical support to farmers (field tools, GPS, safety gear, boots)-$5,000; 4WD Pick-up for Extension Services to provide technical support to farmers (40,000, Year 1); materials for farmers (small supplies for propagation/planting i.e. seedlings, basic tools, irrigation hose, shade cover material, compost bins, etc., Year 2 & 3)-$5,000. Total cost: $50,000 during Years 1 to 3. (Output 3.2). g) Materials and goods for rebuilding two (2) national propagation stations (Wallilabou and Dumbarton) in a climate-proof manner, providing irrigation, water pumps / collection, shade houses, composting, and other (as identified by Agriculture Division and CSA Expert) as demonstration sites for CSA and National Learning Centers. Total cost: $87,000 ($43,500/station) during Years 2 and 3 (Output 3.2).
26	Grants to support farmers/producers to integrate CSA and SLM into farming/production practices and at least 8 small sustainable livelihood/ agro-processing businesses to support the CSA / SLM production value chain and provide diversification of livelihoods. These grants will be implemented under the guidelines of UNDP for Low-value grants. Total cost: $160,500 during Years 2 to 4 (Output 3.2-3.3).
27	Printed materials (brochures, posters, technical packets, guides, etc.) to support public education, awareness and outreach for farmers and communities in the 3 target watersheds regarding SLM / CSA in general (i.e. manuals and toolkits for farmers and extension, materials to support soil conservation/riverbank stabilization/water testing, water quality monitoring plan, other), ensuring gender issues are incorporated (with support of Project Gender Expert), as well as materials (billboards, printed training materials) to support National Propagation Center and Learning Center (Dumbarton and Wallilabou). Total cost: $40,000 during Years 2 to 4. (Outputs 3.1-3.3)
28	Incidental expenses related to CSA and SLM for integrated landscape management at the site and national level. Total cost: $5,777 during Years 1 to 5 (all outputs in component).
29	a) Consultation workshops and meetings for the operationalization of broad-based stakeholder groups for watershed management to address land degradation and environmental issues, with support of Community Engagement Specialist to help ensure engagement of rural communities and women. Total cost: $5,300 during Years 2 to 4 (Output 3.2). b) Consultation workshops and meetings for the identification of sustainable livelihood beneficiaries, initiatives and overall consensus building on CSA and market needs and current capacities and needs, with support of Community Engagement Specialist to help ensure engagement of rural communities and women. Total cost: $5,300 during Year2 2 to 4 (Output 3.2).
Outcome 4. Knowledge management and M&E.	

30	Mid-term project review. Total cost: $14,000 during Year 2 (Output 4.3). Terminal project evaluation. Total cost: $19,200 during Year 5 (Output 4.3).
31	a) M&E / Safeguards Expert: project monitoring including updating indicators in project results framework and monitoring of environmental and social risks. $3000/week for 10.5 weeks. Total cost: $31,500 during Years 1 to 5 (Output 4.3). b) Project Manager (20%): Management support for knowledge management and M& E support. $3,000/month for 10 months over 4.5 years. Total cost: $30,000 during Years 1 to 5 (all outputs in component). c) Project Gender Specialist. Support and monitoring of gender mainstreaming (Gender Action Plan). $3000/month for 6.6 months. Total cost: $19,800 during Years 1 to 5 (all outputs in component). d) Communications/Knowledge Management Expert to develop communication strategy, support communication and awareness-raising activities and document and systematize lessons learnt and best practices. $2500/month for 8 months over 4.5 Years. Total cost: $20,000 during Years 1 to 5. (Outputs 4.1- 4.2)
32	a) Travel costs for gender mainstreaming activities: Total cost: $4,500 during Years 1 to 4 (all outputs in component). b) Travel costs for M&E of project activities: Total cost: $4,500 during Years 1 to 5 (Output 4.3). c) Travel costs for mid-term project review (including daily subsistence allowance): Total cost: $5,000 during Year 2 (Output 4.3). d) Travel costs for terminal evaluation (including daily subsistence allowance): Total cost: $7,800 during Year 5 (Output 4.3). e) Travel costs for communication and knowledge management activities: Total cost: $4,500 during Years 1 to 5 (Outputs 4.1 and 4.2).
33	a) External audit (5). Total cost: $20,000 for 4.5 years (Output 4.3).
34	a) Publications and media products related to knowledge management and communication. Total cost: $12,000 during years 1 to 4 (Outputs 4.1 and 4.2). b) Project Web site development. Total cost: $8,000 during year 1 (Output 4.1 and 4.2).
35	a) Project Inception Workshop. Total cost $5,000 during Year 1. b) Knowledge forums to share lessons learnt and good practices with multiple stakeholders. Total cost: $3,000 during years 2 to 4 (Output 4.1). c) Mid-term project review related workshops. Total cost: $1,000 during Year 5 (Output 4.3). d) Terminal evaluation related workshops. Total cost: $1,000 during Year 5 (Output 4.3). e) Project board meetings. Total cost: $2,000 during years 1 to 5 (Output 4.3).
Project Management Unit	
36	a) Project Manager (10%): project planning, day-to-day management of project activities, project reporting, maintaining key relationships among stakeholders. $3000/month for 5 months over 4.5 years. Total cost: $15,000 (all outputs in component). b) Financial/Administrative Assistant: financial management of the project, accounting, purchasing, and reporting, etc. Total cost: $91,800; $1,700/month for 54 months.
37	Travel costs for Project management. Total cost: $5,200 during Years 1 to 5.
38	Office furniture. Total cost $2,000 during Year 1.
39	Office supplies. Total cost $2,000 during Years 1.
40	a) Laptop computer Project Manager, external monitor & docking station. Total cost: $2,250 b) Laptop computer Financial Assistant, external monitor & docking station. Total cost: $2,250 c) Printer (1). Total cost: $550 d) Digital camera (1). Total cost: $250. e) Projector (1). Total cost: $250.
41	Incidental expenses related to project management. Total cost: $2,000 Years 1 to 4.
42	Direct Project Costs (DPC). As stipulated in Annex 6: Letter of Agreement for UNDP Direct Project Services, the DPCs includes: $6,685 for payments, disbursements and other financial transactions (estimating 110 payment instructions @ $60.77/each); $2,130 for travel authorisations, visa requests, ticketing and travel arrangements (management for 19 individual travel arrangements @ $112.02/mgt action); $31,200 for recruitment of staff, project personnel and consultants (of which $18,283.36 is for recruitment of core Project management unit, $6,027.70 is for recruitment of international consultants, and 6,880.80 is for recruitment of local consultants); and $15,345 for procurement of services and equipment and disposal/sale of equipment (of which $9,973.56 involves local CAP and $5,369.46 not involving local CAP). Total cost: $55,360 during Years 1 to 5.

X. LEGAL CONTEXT

201. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of (country) and UNDP, signed on (date). All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

202. This project will be implemented by [name of entity] ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

203. This project will be implemented by Ministry of Agriculture, Rural Transformation, Fisheries, Forestry, Industry and Lands ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply**.**

204. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

XI. RISK MANAGEMENT

205. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

206. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

207. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

208. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

209. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

210. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

211. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

212. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

213. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

214. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

215. Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

216. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

217. Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

218. *Note:* The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

219. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

220. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take

appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

221. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XII. MANDATORY ANNEXES

A. Multi-year Workplan
B. Core Indicators
C. Overview of technical consultancies/subcontracts
D. Terms of Reference for Project Board, Project Manager, Chief Technical Advisor and other positions as appropriate
E. UNDP Social and Environmental and Social Screening Template (SESP) (see separate file)
F. Stakeholder Engagement Plan
G. Gender Analysis and Action Plan
H. UNDP Risk Log
I. Results of the capacity assessment of the project implementing partner and HACT micro assessment
J. Additional agreements.
K. UNDP Project Quality Assurance Report (to be completed in UNDP online corporate planning system by UNDP Country Office, does not need to be attached as separate document)
L. Target landscape profile
M. List of people consulted during project development
N. Capacity development scorecard
O. Parallel Co-Financing Summary (see letters in separate file)
P. GEF BD-1 Tracking Tool

ANNEX A. MULTI YEAR WORK PLAN

Task	Year 1				Year 2				Year 3				Year 4				Year 5	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Component 1. Strengthened institutional framework for Protected Areas, Ecosystem Conservation and Sustainable Land Use																		
1.1 Natural resources information management system harmonized for multi-departmental use																		
Develop centralized information management system and monitoring system and equip and train key agencies to access and use.			X	X	X	X	X	X										
Develop legal data-sharing and coordination agreements to operationalize an information management and monitoring system.					X	X												
Develop monitoring and tracking programmes, protocols and guidelines for all data collection systems that will be monitored, including SMART indicators. Includes training and department support.		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Assess, enhance and develop sampling and monitoring protocols National water testing services (freshwater and saltwater) and develop National soil conservation monitoring programme, including improved equipment and developing data collection, recording and monitoring systems for both soil and water quality testing			X	X	X	X	X	X										
Develop guidance tools for establishing baseline data for LDN monitoring, support LDN-TSP through consultative process, with monitoring protocols and supported by improved capacity for implementation.			X	X	X	X	X	X										
Establish baselines for land use/land cover in project target sites through purchase and interpretation of high resolution satellite images supported by ground-truthing.		X	X	X													X	X
Carry out baseline gender responsive socioeconomic and livelihood analysis along with designing and developing gender responsive data collection tools.		X	X	X														
Conduct a KAPB survey as a precursor to a country-specific communication strategy.		X	X	X														
Renovate/ upgrade Forestry Services outbuilding to serve as National Biodiversity Interpretation Center, including development of interpretation and education materials for support Project, BD, PA and SLM efforts.					X	X	X	X										
1.2 Strengthened coherence of policy, legal and regulatory framework for INRM, biodiversity, and protected areas																		

Carry out policy, legal and regulatory review and prioritize and address gaps through updating / developing legal instruments, incorporating a gender analysis into the review process.			X	X	X	X	X											
Develop Forest Policy through gender inclusive consultative /participatory process					X	X	X	X	X	X	X	X						
Develop and carry out gender awareness and gender mainstreaming seminar for policy makers and local level stakeholders		X	X															
1.3 Strengthened coordination and planning framework for INRM.																		
Revise /update Protected Area System Plan and Policy through gender inclusive consultative / participatory process					X	X	X	X	X	X	X	X						
Support reactivation of NEAB and Technical Advisory Committee		X	X	X														
1.4 Enhanced financial sustainability framework for Protected Areas System,																		
Assess the existing legal and institutional conditions for sustainable financing for PAs and NTF capitalization, develop a PA System Business (Sustainable Financing) Plan, update FSC, and develop implementation plan for 1 mechanism identified in PA System Plan and support initial implementation.					X	X	X	X	X	X	X	X						
1.5 Strengthened Institutional Capacities for INRM (PA, BD &SLM) to support conservation of biodiversity and reduce land degradation.																		
Carry out capacity needs assessment, 5-10 capacity development plan and design and initiate implementation of a training program for staff from the relevant agencies to support implementation of systemic level decision making tools and processes (Component 1) and site level activities (Components 2 & 3).			X	X	X	X	X	X										
Component 2. Establishment and effective management of new and existing PAs																		
2.1 Central Mountain Range Forest Reserve[100] established, demarcated and operationalized																		
Support Forestry Services to delineate and demarcate the consolidated boundary of CMFR with support of high resolution satellite images, ground truthing and drone technology, including support for legal gazette process			X	X	X	X												
Procure necessary equipment for implementation of site activities and site operationalization			X	X	X	X	X	X										
Implement baseline biodiversity and ecological assessment / inventory of the CMFR and Buccament watershed - develop monitoring programs, conduct baseline studies to understand current population, distribution of		X	X	X	X	X	X	X										

key IAS (mongoose, rats, tbd) in prioritized areas and field training of BD/Ecological assessment techniques.																		
Carry out censuses and develop 4 species conservation and action plans for *Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi* in CMFR, including focused research on movement patterns of *Amazona guildingii.*					X	X	X	X	X	X	X	X						
Develop IAS control plan, protocols, provide training and initiate implementation for the removal of IAS in prioritized locations to support conservation of 4 species of global significance in CMFR.							X	X	X	X	X	X	X	X	X	X		
Develop an evidenced based gender inclusive participatory management plan with implementation initiated for the proposed CMFR for biodiversity conservation, ecosystem services and species of global significance.									X	X	X	X						
Develop PA business/operational plans, including all financial needs and gaps assessed.									X	X	X	X						
Implement gender inclusive communication and community-based outreach and education activities				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.2 Leeward Coast Marine Park established, with conservation zones demarcated and operationalization initiated.																		
Survey and support gazetting of LCMP.					X	X	X	X										
Conduct reef and BD assessment, including baseline assessment of coral reef health indicators and development of monitoring programme, data sets and habitat maps. Provide AGRAA training for 4 staff for monitoring and assessment.		X	X	X	X	X	X	X										
Develop and demarcate conservation zones, develop a participatory conservation zone plan for uses, and initiate operationalization, using a gender inclusive participatory approach and with support of Project Gender Specialist					X	X	X	X	X	X	X	X						
Procure necessary equipment for implementation of site activities and site operationalization			X	X	X	X	X	X										
Develop a financing needs and gap assessment for the LCMP with recommendations for addressing gaps									X	X	X	X						
Support dive training for open water certifications for Fisheries Division and National Parks staff		X	X															
Support conservation efforts of the SVG Sea Turtle Conservation Program								X	X	X	X	X	X	X	X	X	X	X
Support the development and implementation of an IAS control programme in partnership with local dive operator for lionfish control									X	X	X	X	X	X	X	X		
Implement gender inclusive communication and outreach activities				X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.3 Chatham Bay Wildlife Reserve is established, demarcated and operationalized																		

Carry out baseline comprehensive census and focused habitat research to identify habitat for protection and support gazette process			X	X	X	X													
Develop a gender responsive participatory management plan for the proposed Chatham Bay Wildlife Reserve									X	X	X	X							
Survey and demarcate site, including with signage							X	X											
Procure necessary equipment for implementation of site activities and site operationalization			X	X	X	X	X	X											
Initiate operationalization site management, including enhanced enforcement					X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Develop IAS control plan, protocols, provide training and initiate implementation for the removal of IAS in prioritized locations to support conservation of *Gonatodes daudini*					X	X	X	X	X	X	X	X	X	X	X	X			
Develop and carry out gender inclusive outreach, communication and awareness-raising activities, including outreach and information sharing materials				X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Develop PA business/operational plans, including all financial needs and gaps assessed.						X	X	X	X	X	X								
Support sustainable finance mechanism For UI Environmental Attackers to sustain long-term co-management arrangements with Forestry Services					X	X	X	X											
Component 3. Integrated watershed management measures in R2R setting to reduce threats to upstream PA and downstream MPA/MMA																			
3.1 Improved SLM practices in 3 upper watershed landscapes in the Central Mountain Forest Reserve, and with watershed management plan developed and implementation initiated in the pilot Ridge to Reef site																			
Support SLM measures in 3 upper watersheds within the CMFR (soil conservation, plantation management and reforestation), with BD mainstreamed			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Develop gender responsive participatory Integrated Watershed Management Plan for the Buccament watershed, with implementation initiated					X	X	X	X	X	X	X	X							
Develop baseline values and monitoring indicators in the Buccament watershed based on SMART indicators for water (freshwater & saltwater) and soil conservation activities and LDN baseline indicators.			X	X	X	X													
Support Soil and Water Conservation Unit, Forestry Services and Agricultural Extension Services in identifying, prioritizing and implementing soil conservation and riverbank stabilization measures in the Buccament watershed			X	X	X	X	X	X	X	X	X	X	X	X	X	X			
3.2 National learning centers and demonstration sites on SLM and CSA																			

Design, cost and upgrade the 2 National Propagation Centers to support climate resilient agriculture, propagation, and to serve as National Learning Centers and as demonstration sites for climate smart agricultural practices.			X	X	X	X	X	X	X	X	X	X	X	X				
Develop and demonstrate 2 model farms at Prop Centers in collaboration with communities and farmers, with enhanced techniques and low-cost innovations demonstrated, and training and interpretation provided						X	X	X	X	X	X	X	X	X				
Carry out a capacity needs assessment and a capacity development plan, developing and implementing a training programme for extension services from the MAFFRIL, farmers and community groups to implement enhanced SLM/CSA activities in the 3 target watersheds, including BD mainstreaming					X	X	X	X	X	X	X	X	X					
Construct visitor outbuilding at Montreal using trees harvested from plantation management activities, improve trail maintenance and interpretation for CSA, SLM and BD conservation activities.									X	X								
Support equipment and techniques for Extension Officers for demonstration to farmers in the pilot R2R site in the Buccament watershed			X	X	X	X	X	X										
Develop a compositing initiative at the Wallilabou and Dumbarton Propagation Centers for distribution to farmers									X	X	X	X						
Develop and implement micro-capital grant process for farmer implementation of enhanced CSA / SLM and sustainable livelihood initiatives, included training for grant management (TBD during Project inception). Linked with Output 3.3.					X	X	X	X	X	X	X	X	X	X	X	X		
Support gender responsive communication, awareness and raising outreach for farmers and communities in the 3 target watersheds regarding SLM / CSA, BD mainstreaming, incorporating gender issues and outputs of KAPB study.			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Design, develop and distribute gender responsive printed materials (brochures, posters, technical packets, guides, etc.) to support public education, awareness and outreach for farmers and communities in the 3 target watersheds regarding SLM / CSA in general, gender issues					X	X	X	X	X	X	X	X	X	X	X	X		
3.3 Development of a sustainable livelihood programme																		
Identify priority beneficiaries, assess previous agriculture micro-enterprise / IGAs development initiatives, conduct analysis of market demands and gender analysis of value chain to identify feasible and sustainable livelihood activities.					X	X												

Support development of partnerships for cluster initiatives for agro-processing for CSA value chain and beekeeping / honey (production, post-production and marketing) with support for procurement, refurbishing and equipping communal (container) spaces, providing guidance in the development of management, business and sustainability plans for both cluster facility (including SOPs).					X	X	X	X	X	X	X	X						
Assess capacity needs and provide small business trainings for Project beneficiaries, grant recipients, communities, producers and agro-processors, including capacity building exercises to support women in alternative livelihood and small businesses, including identifying and facilitating access to micro-finance opportunities.							X	X	X	X	X	X	X	X				
Develop and implement micro-capital grant process for sustainable livelihood initiatives that support the CSA value chain and women-owned businesses and with links to CSA producers and producer grant recipients. Linked with Output 3.2.					X	X	X	X	X	X	X	X	X	X	X	X		
Support communication, awareness and raising outreach for agroprocessors, producers and communities regarding sustainable livelihoods, micro-enterprise development and the CSA value chain that supports BD mainstreaming, incorporating gender issues and outputs of KAPB study.					X	X	X	X	X	X	X	X	X	X	X	X		
Component 4: Knowledge management for SLM, CSA and biodiversity conservation.																		
4.1 Output 4.1 Technical knowledge captured, experiences and lessons learned disseminated.																		
Disseminate good practices and lessons learned for biodiversity conservation, SLM and CSA, including gender mainstreaming					X	X	X	X	X	X	X	X	X	X	X	X		
4.2 Media products promote outreach and increased public awareness / environmental education of SLM, CSA and biodiversity conservation																		
Develop communication plan and strategy					X	X												
Knowledge forums to share lessons learnt and good practices with multiple stakeholders.								X				X				X		
Develop media products (e.g., videos, photo essays, fact sheets, case studies, project web platform, etc.) to increase awareness and promote outreach and education of project activities, knowledge, and lessons learned							X	X	X	X	X	X	X	X	X	X		
Implement a gender responsive community-awareness program																		
4.3. Monitoring and evaluation of project implementation																		
Conduct M&E of the project's implementation following GEF and UNDP guidelines and according to the M&E plan	X				X			X	X				X				X	X

ANNEX B. CORE INDICATORS

Interim Offline Reporting Template for GEF-7 Core Indicators
13 Aug 2018 / VERSION 04

Contents

Core Indicator 1: Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares)

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)
12,100	13,277		

Figure at a given stage must be the sum of all figures reported under the two sub-indicators (1.1 and 1.2) for that stage.

1.1 Terrestrial protected areas newly created

Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)
12,100	13,277		

Figure at a given stage must be the sum of all individual PAs reported in the next table, for that stage.

Name of Protected Area	WDPA ID	IUCN Category	Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)
Central Mountain Forest Reserve		4	12,000	13,214		
Chatham Bay Forest Reserve		4	100	63		

Name of Protected Area	METT Score at CEO Endorsement	METT Score at MTR	METT Score at TE
Central Mountain Forest Reserve	51		
Chatham Bay Forest Reserve	30		

Add rows as needed; ensure all relevant PAs are listed in both this and the previous table. Note no METT score at PIF.

1.2 Terrestrial protected areas under improved management effectiveness (no value indicated to avoid double-counting)

Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)

Figure at a given stage must be the sum of all individual PAs reported in the next table, for that stage.

Name of Protected Area	WDPA ID	IUCN Category	Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)

Name of Protected Area	METT Score at CEO Endorsement	METT Score at MTR	METT Score at TE

Add rows as needed; ensure all relevant PAs are listed in both this and the previous table. Note no METT score at PIF.

Core Indicator 2: Marine protected areas created or under improved management for conservation and sustainable use (hectares)

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)
1,600	2,183		

Figure at a given stage must be the sum of all figures reported under the two sub-indicators (2.1 and 2.2) for that stage.

2.1 Marine protected areas newly created

Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)
1,600	2,183		

Figure at a given stage must be the sum of all individual PAs reported in the next table, for that stage.

Name of Protected Area	WDPA ID	IUCN Category	Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)
Leeward Coast Marine Park		6	1,600	2,183		

Add rows as needed.

Name of Protected Area	METT Score at CEO Endorsement	METT Score at MTR	METT Score at TE
Leeward Coast Marine Park	27		

Add rows as needed; ensure all relevant PAs are listed in both this and the previous table. Note no METT score at PIF.

2.2 Marine protected areas under improved management effectiveness

Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)

Figure at a given stage must be the sum of all individual PAs reported in the next table, for that stage.

Name of Protected Area	WDPA ID	IUCN Category	Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)

Name of Protected Area	METT Score at CEO Endorsement	METT Score at MTR	METT Score at TE

Core Indicator 3: Area of land restored (hectares)

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)
N/A	514		

Figure at a given stage must be the sum of all figures reported under the four sub-indicators (3.1, 3.2, 3.3 and 3.4) for that stage.

3.1 Area of degraded agricultural lands restored

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)
N/A	396[101]		

3.2 Area of forest and forest land restored

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)
N/A	118[102]		

3.3 Area of natural grass and shrublands restored

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)

3.4 Area of wetlands (including estuaries and mangroves) restored

Ha (expected at PIF)	Ha (expected at CEO Endorsement)	Ha (achieved at MTR)	Ha (achieved at TE)

[101] Equals 10% of degraded agriculture lands (3,960 ha), based on extrapolation from PRF Indicator 12 (10% of farms targeted in watersheds implementing project supported enhanced CSA/SLM practices)
[102] Forest reforestation (37 ha), soil management (31 ha), plantation management / conversion to native species (59 ha) in upper watersheds

Core 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)
686	686		

Figure at a given stage must be the sum of all figures reported under the four sub-indicators (4.1, 4.2, 4.3 and 4.4) for that stage.

4.1 Area of landscapes under improved management to benefit biodiversity (qualitative assessment, noncertified)

Ha (expected at PIF)	Qualitative description at PIF	Ha (expected at CEO Endorsement)	Qualitative description at CEO ER	Ha (achieved at MTR)	Qualitative description at MTR	Ha (achieved at TE)	Qualitative description at TE

4.2 Area of landscapes that meet national or international third-party certification and that incorporates biodiversity considerations

Ha (expected at PIF)	Type of Certification at PIF	Ha (expected at CEO Endorsement)	Type of Certification at CEO ER	Ha (achieved at MTR)	Type of Certification at MTR	Ha (achieved at TE)	Type of Certification at TE

4.3 Area of landscapes under sustainable land management in production systems

Ha (expected at PIF)	Description of Management Practices at PIF	Ha (expected at CEO Endorsement)	Description of Management Practices at CEO ER	Ha (achieved at MTR)	Description of Management Practices at MTR	Ha (achieved at TE)	Description of Management Practices at TE
686	Enhanced SLM and CSA techniques	686	Enhanced SLM and CSA techniques				

4.4 Area of High Conservation Value forest loss avoided

Total Ha (expected at PIF)	Total Ha (expected at CEO Endorsement)	Total Ha (achieved at MTR)	Total Ha (achieved at TE)

Figure at a given stage must be the sum of all individual PAs reported in the next table, for that stage. Prepare and upload file that justifies the HCVF.

Name of HCVF	Ha (expected at PIF)	Counterfactual at PIF	Ha (expected at CEO Endorsement)	Counterfactual at CEO ER	Ha (achieved at MTR)	Ha (achieved at TE)

Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Total number (expected at PIF)	Total number (expected at CEO Endorsement)	Total number (achieved at MTR)	Total number (achieved at TE)
Women	N/A	254		
Men	N/A	592		
Total	N/A	846 (at least 30% women)[103]		

[103] As indicated in PRF Mandatory Indicator 2. To be confirmed during Year 1 of Project implementation, and monitored throughout Project implementation

ANNEX C. SUMMARY OF TECHNICAL CONSULTANCIES

Consultant	Time Input	Tasks, Inputs and Outputs
For Project Management / Monitoring & Evaluation		
Local / National contracting		
Project Manager Rate: $3,000/month	54 months / over 4.5years	The Project Manager, with technical support from the CTA/BD Expert, will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. See the full TOR in Annex D for details.
Financial and Administrative Assistant Rate: $1,700/month	54 months / over 4.5years	Financial/Administrative Assistant, together with the Project Manager, is responsible for financial management of the project, accounting, purchasing, and reporting, etc. See the full TOR in Annex D for details.
Project Gender Specialist. Rate: $3,000/month	27 months / over 4.5 years	Will be responsible for supporting and monitoring of gender mainstreaming in the project, including the implementation of the Gender Action Plan. See the full TOR in Annex D for details.
Communications/Knowledge Management Expert Rate: $2,500/month	29 months / over 4.5 years	Will be responsible to develop communication strategy, support communication and awareness-raising activities, document and systematize lessons learnt and best practices, and implement and analyze KABP surveys
International / Regional and global contracting		
Chief Technical Advisor/Biodiversity Expert Rate: $136,690	Lump Sum based on Deliverable (approx. 188 days / over 4.5 years)	Will be responsible for providing overall Project technical support to the Project and biodiversity related Project interventions, as well as ensuring biodiversity is mainstreamed into Component activities and BD considerations are incorporated into Project decision making.
M&E / Safeguards Expert Rate: $3,000/week	10.5 weeks over 4.5 years	Will be responsible for project monitoring including updating indicators in project results framework and monitoring of environmental and social risks
M&E Expert Rate: $3,500/week	4 weeks / over 3 months (year 2)	Will be responsible for conducting the mid-term project review, with support from the M&E / Safeguards Expert
M&E Expert Rate: $3,850/week	4 weeks / over 3 months (year 5)	Will be responsible for conducting the terminal evaluation of the project, with support from the M&E / Safeguards Expert

Consultant	Time Input	Tasks, Inputs and Outputs
For Technical Assistance		
Outcome 1		
Local / National contracting		
Data Systems Design & Management Expert Rate: $40,000	Lump Sum based on Deliverable During Years 1 & 2	Data Systems Design & Management Expert to design and develop inter-departmental Biodiversity and Land Use Database and monitoring systems/tracking tools for LD/BD for multi-departmental use.
Legal Consultant Rate: $40,000	Lump Sum based on Deliverable During Year 2	For Output 1.1, will be responsible for carrying carry out consultations and draft data-sharing agreements to operationalize an information management and monitoring system for SLM, CSA, and biodiversity conservation.
Satellite image Interpretation Expert Rate: $16,000	Lump Sum based on Deliverable During Years 1 & 2	For Output 1.1, will be responsible for satellite image interpretation to develop baseline land cover maps, calculate land cover areas / uses for baseline and end of project to document change.
Interpretation Design Specialist Rate: $10,000	Lump Sum based on Deliverable During Years 1 - 3	For all outputs in component, will be responsible for designing interpretation and outreach materials for Biodiversity Interpretation Center that support Project, BD, PA, SLM awareness, incorporating outputs of KAPB study
Community Engagement Specialist Rate: $280/day	25 days / over 4.5 years	For Output 1.1, will be responsible for supporting stakeholder consultations, workshops and meetings, with support from Project Gender Specialist to engage with women, women leaders and representatives of women's organizations, and to ensure women participation and to support costs for differentiated spaces for women consultations including transportations costs and possible child care
Capacity Building Specialist (with INRM/PA expertise) Rate: $55,000	Lump Sum based on Deliverable During Years 1 & 2	For Output 1.5, will be responsible for carrying out capacity needs assessment, 5-10 year capacity development plan and design and implementing a training program for staff from the relevant agencies in biodiversity conservation, land use management, with collaboration with SVG Technical College / Tertiary institutions and links with other training programs.
International / Regional and global contracting		
International Socio-economic expert Rate: $29,000	Lump Sum based on Deliverable During Year 1	For Output 1.2, will be responsible for conducting a gender responsive socio-economic analysis of the PAs to inform the expansions and ensure vulnerable groups are not negatively impacted, with data collection and ensuring gender data and gender responsive data is input into the project databases for use by stakeholders in policy formulation and planning.

Consultant	Time Input	Tasks, Inputs and Outputs
Legal Consultant Rate: $60,000	Lump Sum based on Deliverable During Years 1 & 2	For Output 1.2, will be responsible for developing and reviewing policies/legislations/regulations to ID gaps/needs, build consensus on priority legislation/regulations to update, draft legislation/regulations, carry out consultations / workshops and incorporate a gender analysis in legal review
Forest Management / Natural Resource Policy Expert Rate: $36,000	Lump Sum based on Deliverable During Years 2 & 3	For Output 1.2, will be responsible for developing Forest Policy through extensive stakeholder participatory process, including workshops. Travel costs budgeted separately.
Protected Area Planning Expert Rate: $36,000	Lump Sum based on Deliverable During Years 2 & 3	For Output 1.2, will be responsible for updating / revising PA System Plan and PA Policy note through extensive gender inclusive stakeholder participatory process, including workshops. Travel costs budgeted separately.
Sustainable Finance Consultant Rate: $31,000	Lump Sum based on Deliverable During Years 2 & 3	For Output 1.4, will be responsible for reviewing and assessing the existing legal and institutional conditions for sustainable financing for PAs, develop a PA System Business (Sustainable Financing) Plan, develop implementation plan, update the Financial Sustainability Scorecard to include needed data for baseline, and support initial implementation of 1 mechanism identified. Travel costs budgeted separately.
SLM/Monitoring Expert (with CSA expertise) Rate: $3,500/month	14 months / over 4.5 years	For Outputs 1.1 and 1.2, will be responsible for: 1) developing monitoring and tracking programmes, protocols and guidelines for all data collection systems, incorporating SMART indicators, and provide training and department support for their implementation; 2) developing Soil Conservation Monitoring Programme and support its implementation and develop baseline; 3) assessing and developing a comprehensive programme to provide ongoing national water quality testing services and to develop data collection system and monitoring protocols for measures implemented, addressing data and monitoring gaps identified; 4) providing technical support for Forest Policy development.
For Technical Assistance		
Outcome 2		
Local / National contracting		
GIS Specialist Rate: $15,000	Lump Sum based on Deliverable During Years 1 & 3	For Outputs 2.1, will be responsible for supporting PA boundary delineation (Year 1 - CMFR, $7,500, Year 2 - LCMP, $7500), georeferencing for ground-truthing by Forestry Services
Legal Consultant Rate: $20,000	Lump Sum based on Deliverable During Years 2 & 3	For Outputs 2.1, will be responsible for support drafting of Cabinet submissions / documentation for gazette of CMFR, LCMP & Chatham Bay, drafting co-management arrangements for UIEA and/or MOUs.
Community Engagement Specialist	68 days / over 4.5 years	For Outputs 2.1 – 2.3, will be responsible for outreach to communities to 1) to support stakeholder consultations, workshops and meetings, with support from Project Gender Specialist to engage with women, women leaders and

Consultant	Time Input	Tasks, Inputs and Outputs
Rate: $280/day	During Years 2 - 4	representatives of women's organizations, and to ensure women participation and to support costs for differentiated spaces for women consultations including transportations costs and possible child care (Outputs 2.1 & 2.2), and 2) for Chatham Bay, to train Youth Empowerment Services and Union Island Environmental Attackers staff to continue community outreach activities, and to provide training and tools for local artisans and small enterprises to develop livelihoods in UI that promote the UI Gecko
PA Enforcement Specialist Rate: $2500/week	2 weeks During Year 2	For Outputs 2.1, will be responsible for developing and carrying out enforcement training for CMFR and Chatham Bay for Forestry Services staff and IUEA for 1 week (class and field), including review of laws and regulations and site visits
Field Assistants (2) Rate: $450/month	30 months (each) During Years 1 & 3	For Outputs 2.1 & 2.3, will be supporting implementation of IAS control/removal measures prioritized locations to support species recovery of 5 species of global significance (CMFR, Chatham Bay)
Field Assistants (4) Rate: $450/month	4 month (each) During Year 2	For Outputs 2.1, will be supporting forestry staff for boundary delineation & demarcation
Field Assistants (2) Rate: $450/month	7 months (each) During Years 1 & 2	For Outputs 2.1, will be supporting BD and Ecological Assessment/Inventory of the CMFR.
Field Assistants (4) Rate: $450/month	4 month (each) During Year 2	For Outputs 2.1, will be supporting species census (*Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi, Amazona guildingii*) and research on habitat and movement patterns for Amazona guildingii.
Forest Rangers (6) Rate: $500/month	36 month (each) During years 1-4	For Outputs 2.3, will be carry out site enforcement at Chatham Bay to address illegal poaching of *Gonatodes daudini* and overall site management.
IAS / lionfish control specialist Rate: $20,000	During Years 2 - 4.5	For Outputs 2.2, to support dive company IAS/lionfish removal programme, including record keeping, lionfish control and monitoring, outreach activities, including fish fry and other outreach.
Interpretation Design Specialist Rate: $8,000	Lump Sum based on Deliverable During Year 3	For Outputs 2.3, will be responsible for designing interpretation and outreach materials to support gecko conservation efforts (including Union Island)
Construction company Rate: $100,000	Lump Sum based on Deliverable During Year 2	For Outputs 2.3, will be responsible for renovating/upgrading existing storage building at the Forestry Services compound to service as BD Interpretation Center/Visitor Center for Project activities and Forestry Services, NPRBA and Fisheries BD/SLM/PA/INRM activities with facilities for visitor use, office space. Total cost: $100,000 during Year 2.

Consultant	Time Input	Tasks, Inputs and Outputs
International / Regional and global contracting		
IAS Expert Rate: $26,000	Lump Sum based on Deliverable During Year 3	For Outputs 2.1 & 2.3, will be responsible for develop IAS control plan, protocols, provide training and initiate implementation with Field Assistants to support the removal of IAS in prioritized locations to support species recovery of 5 species of global significance (4 in CMFR, 1 in Chatham Bay). Travel costs budgeted separately.
PA Financial Expert Rate: $51,000	Lump Sum based on Deliverable During Years 2 & 3	For Outputs 2.1, responsible for developing 2 gender responsive site business/operational plans, including all needs and gaps assessed (for CMFR and Chatham Bay), as well as a financing needs and gap assessment for the LCMP with recommendations for addressing gaps, including collecting data needed for Financial Scorecard. Travel costs budgeted separately.
Gecko/Herpetofauna Expert/Biologist Rate: $30,000	Lump Sum based on Deliverable During Years 1 & 2	For Outputs 2.1, responsible for carrying out baseline gecko census to ID abundance and distribution, habitat study, species movement patterns, with on-site training for Forestry/UIEA to repeat, with protocols developed. ID predators/develop 5-year control plan. Train field support/UIEA/Forestry staff in IAS, BD, Endangered species, other.
Endangered Species Consultant Firm Rate: $101,000	Lump Sum based on Deliverable During Years 2 & 3	For Outputs 2.1 & 2.3, this consultancy will include: 1) three (3) Endangered species experts for *Chironius vincenti, Pristimantis shrevei, Catharopeza bishopi* responsible for implementing species census with Forestry Services staff and developing 3 Species Recovery and Action Plans; and 2) 1 Endangered species expert for *Amazona guildingii* to support species census with Forestry Services staff, develop Species Recovery and Action Plan, and conduct research on habitat and movement patterns.
Marine PA Planning / Zoning Consultant Firm Rate: $80,000	Lump Sum based on Deliverable During Years 3 & 4	For Outputs 2.2, Marine biologist and marine engineer team responsible for 1) identifying conservation zones (based on BD assessment), carry out consultations, develop conservation zoning plan and guidelines through a participatory process and 2) install buoys to demarcate conservation zones (including cost of demarcation buoys and installation of 40 buoys @ $1000).
Terrestrial BD / Ecological Firm Rate: $110,000	Lump Sum based on Deliverable During Years 1 & 2	BD/Ecological Assessment / Inventory to implement baseline biodiversity and ecological assessment / inventory of the CMFR and Buccament watershed - develop monitoring programs, conduct baseline studies to understand current population, distribution of key IAS (mongoose, rats, tbd) in prioritized areas and field training of BD/Ecological assessment techniques.
Marine Biodiversity Ecological Firm Rate: $110,000	Lump Sum based on Deliverable During Years 1 & 2	Marine Biodiversity Ecological Company to conduct reef and BD assessment (consultant provide own gear and monitoring requirement, Including baseline assessment of coral reef health indicators and development of monitoring programme, data sets and habitat maps. Provide AGRAA training for 4 staff for monitoring and assessment.
For Technical Assistance		
Outcome 3		
Local / National contracting		

Consultant	Time Input	Tasks, Inputs and Outputs
Forester Rate: $280 /day	60 days / over 2 years During Year 2 & 3	For Output 3.1, will be responsible for supporting Forestry Services and supervise plantation management and reforestation activities and Field Assistants
Field Assistants (1) Rate: $450 / month	54 months over 4.5 years	For Output 3.1, will be responsible for supporting the Forestry Services with plantation management, reforestation, soil conservation in the 3 upper watersheds in the CMFR, and to support CSA and agroforestry demonstration at Montreal, trail maintenance
Field Assistants (2) Rate: $450 / month	54 months (each) over 4.5 years	For Output 3.1, will be responsible for supporting the Soil and Water Conservation Unit implement soil conservation measures, and for testing water quality (chemical, nutrient, and sedimentation) from streams to determine the baseline water quality and ongoing monitoring in the Project R2R site (Buccament).
Micro-enterprise /agriculture post-production specialist Rate: $50,000	Lump Sum based on Deliverable During Years 2 - 4	For Output 3.3, will be responsible for supporting for: 1) reviewing and assessing previous agriculture micro-enterprise / IGAs and identify lessons learned to support identification and feasibility of livelihood activities; 2) supporting development of partnerships for agro-processing for cluster initiatives for CSA value chain and beekeeping / honey (production, post-production and marketing) and women owned businesses; 3) Providing guidance in the development of management, business and sustainability plans for each cluster facility (including SOPs); 4) assessing capacity needs and provide small business trainings for Project beneficiaries, communities, producers and agro-processors, including capacity building exercises to support women in alternative livelihood and small businesses; 5) provide technical design and implementation of 2 shared container based cluster facilities including identification of needed/prioritized equipment and health and safety standards.
Graphic/Interpretation Design Specialist Rate: $280/day	78 days over 3 years During Years 2 - 4	For Outputs 3.1- 3.3, will be responsible for designing printed materials (brochures, posters, technical packets, guides, etc.) to support public education, awareness and outreach for farmers and communities in the 3 target watersheds regarding SLM / CSA in general, gender issues, including Montreal interpretation building and trail and all signage and information packages for upgraded Propagation Centers / National Learning Center
Community Engagement Specialist Rate: $280/day	46 days over 3 years During Years 2 - 4	For Outputs 3.1- 3.3, will be responsible for providing outreach to rural communities to engage re watershed management planning and activities, development of intersectoral management committee, outreach (Buccament Watershed Mgt and Yambou/Kingstown stakeholder engagement in CSA/SLM activities), and sustainable livelihood initiatives, supported by Project Gender specialist & ensuring participation of women
Construction Firm Rate: $25,000		For Outputs 3.1- 3.3, will be responsible for constructing visitor outbuilding at Montreal using trees harvested from plantation management activities to display interpretation of SLM/BD, including supporting labour costs.

Consultant	Time Input	Tasks, Inputs and Outputs
International / Regional and global contracting		
CSA Expert Rate: $54,000	Lump Sum based on Deliverable During Years 2 - 4	For Outputs 3.1- 3.3, will be responsible for: 1) developing and demonstrating 2 model farms at Prop Centers in collaboration with communities and farmers, using materials available to farmers, with enhanced techniques and low cost innovations demonstrated; 2) providing technical guidance on Propagation Center upgrade for climate resilient agriculture practices; and 3) developing a capacity needs assessment, capacity development plan, and developing / implementing a training programme (workshop, field/farm visit, demonstration sites) for MARFFIL Extension Officers, farmers and community groups for the implementation of CSA activities in the 3 target watersheds (i.e. propagation techniques, maintenance, and documentation).
Agricultural engineer Rate: $30,000	Lump Sum based on Deliverable During Years 2 & 3	For Outputs 3.1- 3.3, will be responsible for designing and supporting procurement and installation of upgrade measures (shade structures, rain water harvesting and water management structures, irrigation, fencing, compost facility, greenhouse, solar water pump, tree and plant seedlings production, to be defined by MARFFIL during Project inception) for 2 National Propagation Centers (Wallilabou, Dumbarton), and to develop standard operating procedures and management plan with provision of related needed capacity building.
Watershed Management Consultant Rate: $45,500	Lump Sum based on Deliverable During Years 2 & 3	For Outputs 3.1- 3.3, will be responsible for developing 1 integrated watershed management plans (Buccament), including detailed environmental characterizations and outputs of socio-economic / livelihood assessment, incorporating gender / women considerations/needs, developing and working with the intersectoral watershed management committee, supported by Community Engagement Specialist and Project Gender Specialist to ensure extensive community engagement and outreach.
SLM/Monitoring Expert (with CSA Expertise) Rate: $3,500/month	17 months / over 4.5 years	For Outputs 3.1- 3.3, will be responsible for providing technical support for: 1) SLM activities in 3 target upper watersheds (plantation management, soil conservation, reforestation); 2) operations of the National Propagation Centers (Wallilabou, Dumbarton); 3) supporting CSA demonstration and propagation activities (field and propagation station); 4) developing freshwater water quality (minerals and sedimentation) and saltwater quality and nearshore sedimentation baseline for Buccament watershed and nearshore coastal waters/coral reef (in collaboration with Fisheries Division), with monitoring system to measure effectiveness of efforts; 5) supporting implementation of soil conservation measures, establish soil conservation baseline (analysis of existing data and collecting baseline data) with monitoring system to measure effectiveness of efforts; 6) developing national Soil Conservation Monitoring Programme; 7) developing riverbank setback criteria and guidelines.
Agricultural Market Specialist Rate: $30,000	Lump Sum based on Deliverable During Years 2 & 3	For Outputs 3.2 & 3.3, will be responsible for 1) conducting a gender responsive market analysis of the value chain of selected crops and CSA; 2) identifying micro-finance opportunities for small and micro-enterprise development, including producers, post-production and other small sustainable livelihoods initiatives; 3) providing support and training for market access and production requirements and standards (local and / or regional, tbd); and 4) providing guidelines and training for micro-finance grant management and application review.

ANNEX D. TERMS OF REFERENCE

1. Terms of Reference for the Project Board

The Project Board (PB) will serve as the project's decision-making body. It will meet according to necessity, at least twice each year, to review project progress, approve project work plans and approve major project deliverables. The PB is responsible for providing the strategic guidance and oversight to project implementation to ensure that it meets the requirements of the approved Project Document and achieves the stated outcomes. The PB's role will include:

- Provide strategic guidance to project implementation;
- Ensure coordination between various donor funded and government funded projects and programmes;
- Ensure coordination with various government agencies and their participation in project activities;
- Agree on Project Manager's responsibilities, as well as the responsibilities of the other members of the PCU;
- Delegate any Project Assurance function as appropriate;
- Review and appraise detailed Project Plan and Annual Work Plan (AWP), including Atlas reports covering activity definition, quality criteria, issue log, updated risk log and the monitoring and communication plan.
- Approve annual project work plans and budgets, at the proposal of the Project Manager;
- Approve any major changes in project plans or programmes;
- Oversee monitoring, evaluation and reporting in line with GEF requirements;
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project;
- Negotiate solutions between the project and any parties beyond the scope of the project;
- Ensure that UNDP Social and Environmental Safeguards Policy is applied throughout project implementation; and, address related grievances as necessary.

As the Project Board will provide overall guidance to the Project; it will not be expected to deal with day-to-day management and administration of the Project. This will be handled by the Project Manager, in coordination with the Executing Agencies, and under guidance from the Country Office of the Implementing Agency (to ensure conformity with Unite Nations' requirements).

The Project Board is especially responsible for evaluation and monitoring of Project outputs and achievements. In its formal meetings, the Project Board will be expected to review the Project work plan and budget expenditure, based on the Project Manager's report. The Project Board should be consulted for supporting any changes to the work plan or budget and is responsible for ensuring that the Project remains on target with respect to its outputs. Where necessary, the Project Board will support definition of new targets in coordination with, and approval from, the Implementing/Executing Agencies.

These terms of reference will be finalized during the Project Inception Workshop.

2. Terms of Reference for Key Project Staff

A full-time Project Manager, a full-time national Project Administrator/Finance Assistant, and part-time staff (CTA/Biodiveristy Expert, SLM/Monitoring Expert, M&E/Safeguards Expert, Project Gender Specialist, and Communications/Knowledge Management Expert) will staff the PCU. A Financial and Administrative Assistant will provide administrative input for successful project implementation, and management and monitoring of all financial project aspects; three Field Assistants will provide local field support. The ToRs for these positions will be further discussed and will be further detailed during the Inception Workshop so that roles and responsibilities and UNDP GEF reporting procedures are clearly defined and understood. Also, during the Inception Workshop the ToRs for specific

consultants and sub-contractors will be fully discussed and those consultancies to be undertaken during Year 1 of project implementation will have full ToRs drafted and selection and hiring procedures defined.

Project Manager

The UNDP CO will hire the Project Manager to carry out the duties specified below, and to provide further technical assistance as required by the project team to fulfill the objectives of the project. He/she will be responsible for ensuring that the project meets its obligations to the GEF and the UNDP, with particular regard to the management aspects of the project, including supervision of staff, serving as stakeholder liaison, implementation of activities, and reporting. The Project Manager will lead the PCU and will be responsible for the day-to-day management of project activities and the delivery of its outputs. The Project Manager will support and coordinate the activities of all partners, staff, and consultants as they relate to the implementation of the project. The Project Manager will be responsible for the following tasks:

- Prepare detailed work plan and budget under the guidance of the Project Board and UNDP;
- Plan the activities of the project and monitor progress against the approved work-plan.
- Supervise and coordinate the production of project outputs, as per the project document in a timely and high quality fashion.
- Coordinate all project inputs and ensure that they are adhere to UNDP procedures for nationally executed projects.
- Supervise and coordinate the work of all project staff, consultants and sub-contractors ensuring timing and quality of outputs.
- Coordinate the recruitment and selection of project personnel, consultants and sub-contracts, including drafting terms of reference and work specifications and overseeing all contractors' work.
- Manage requests for the provision of financial resources by UNDP, through advance of funds, direct payments, or reimbursement using the UNDP provided format.
- Prepare, revise and submit project work and financial plans, as required by Project Board and UNDP.
- Monitor financial resources and accounting to ensure accuracy and reliability of financial reports, submitted on a quarterly basis.
- Manage and monitor the project risks initially identified and submit new risks to the project board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log.
- Liaise with UNDP, Project Board, relevant government agencies, and all project partners, including donor organisations and CSOs for effective coordination of all project activities.
- Facilitate administrative support to subcontractors and training activities supported by the Project.
- Oversee and ensure timely submission of the Inception Report, Project Implementation Report, Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF and other oversight agencies.
- Disseminate project reports and respond to queries from concerned stakeholders.
- Report progress of project to the steering committees, and ensure the fulfilment of PSC directives.
- Oversee the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally.
- Assist community groups, municipalities, CSOs, staff, students and others with development of essential skills through training workshops and on the job training thereby increasing their institutional capabilities.

- Encourage staff, partners and consultants such that strategic, intentional and demonstrable efforts are made to actively include women in the project, including activity design and planning, budgeting, staff and consultant hiring, subcontracting, purchasing, formal community governance and advocacy, outreach to social organizations, training, participation in meetings; and access to program benefits.
- Assists and advises the Project Implementation Units responsible for activity implementation in the target sites.
- Carry regular, announced and unannounced inspections of all sites and the activities of the Project Implementation Units.

Required skills and expertise

- A university degree (MSc or PhD) in a subject related to biodiveristy conservation or sustainable land management.
- At least 7 years of experience in natural resource management (preferably in the context of land degradation, biodiversity conservation or climate resilience).
- At least 5 years of demonstrable project/programme management experience.
- At least 5 years of experience working with ministries, national institutions that are concerned with biodiversity conservation, SLM, CSA and/or protected area system, preferrably in the Caribbean region;.
- Previous experience working with a GEF-supported project is considered an asset.

Competencies

- Strong leadership, managerial and coordination skills, with a demonstrated ability to effectively coordinate the implementation of large multi-stakeholder projects, including financial and technical aspects.
- Ability to effectively manage technical and administrative teams, work with a wide range of stakeholders across various sectors and at all levels, to develop durable partnerships with collaborating agencies.
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project.
- Ability to coordinate and supervise multiple Project Implementation Units in their implementation of technical activities in partnership with a variety of subnational stakeholder groups, including community and government.
- Familiarity with logical frameworks and strategic planning;
- Strong drafting, presentation and reporting skills.
- Strong communication skills, especially in timely and accurate responses to emails.
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search.
- Strong knowledge about the political and socio-economic context related to the Caribbean protected area system, biodiversity conservation, SLM and/or CSA in St Vincent and the Grenadines at the national and subnational levels.
- Flexible and willing to travel as required.
- Excellent communication and writing skills in English;
- Excellent command of English.

Project Finance Assistant

The Project Finance Assistant is responsible for the financial and administrative management of the project activities and assists in the preparation of quarterly and annual work plans and progress reports for review and monitoring by UNDP. Specific responsibilities will include:

- Responsible for providing general financial and administrative support to the project;
- Take own initiative and perform daily work in compliance with annual work schedules;
- Assist project management in performing budget cycle: planning, preparation, revisions, and budget execution;
  Provide assistance to partner agencies involved in project activities, performing and monitoring financial aspects to ensure compliance with budgeted costs in line with UNDP policies and procedures;
- Monitor project expenditures, ensuring that no expenditure is incurred before it has been authorized;
- Assist project team in drafting quarterly and yearly project progress reports concerning financial issues
- Drafting the contracts of national / local consultants and all project staff, in accordance with the instructions of the UNDP Contract Office;
- Ensure that UNDP procurement rules are followed during procurement activities that are carried out by the project and maintain responsibility for the inventory of the project assets;
- Perform preparatory work for mandatory and general budget revisions, annual physical inventory and auditing, and assist external evaluators in fulfilling their mission;
- Prepare all outputs in accordance with the UNDP administrative and financial office guidance;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project financial activities are carried out on schedule and within budget to achieve the project outputs;
- Perform all other financial related duties, upon request;
- Make logistical arrangements for the organization of meetings, consultation processes, and media;
- Draft correspondence related to assigned project areas; provide clarification, follow up, and responses to requests for information;
- Assume overall responsibility for administrative matters of a more general nature, such as registry and maintenance of project files;
- Provide support to the PC and project staff in the coordination and organization of planned activities and their timely implementation;
- Assist the Project Manager in liaising with key stakeholders from the Government of Costa Rica counterpart, co-financing agencies, civil society, and NGOs, as required;
- Ensure the proper use and care of the instruments and equipment used on the project
- Resolve all administrative and support issues that might arise during the project.
- Provide assistance in all logistical arrangements concerning project implementation.

<u>Qualifications (indicative)</u>

- Undergraduate Degree in finance, business sciences, or related fields;
- A demonstrated ability in the financial management of development projects and in liaising and cooperating with government officials, donors, and civil society;
- Self-motivated and ability to work under the pressure;
- Team-oriented, possesses a positive attitude, and works well with others;
- Flexible and willing to travel as required;
- Excellent interpersonal skills;
- Excellent verbal and writing communication skills in English;
- Previous experience working with a GEF and/or UNDP-supported project is considered an asset.

Chief Technical Advisor / Biodiversity Specialist

The Chief Technical Advisor/BD Expert (CTA/BD Expert) will be internationally recruited, based on an open competitive process. The CTA will report to the Project Manager. The main duty of the CTA/BD Expert will be to provide technical guidance to the Project Coordinator and the Implementing Partner (MAFFRIL) on the overall implementation of project activities, technical support for the Project implementation of biodiversity and PA related activities and overall mainstreaming of biodiversity and gender into Project activities, and overall technical support to staff of the MAFFRIL and other relevant institutions and partners on PA management and biodiversity, with specific reference to the following:

- Provide overall technical guidance and advice in the planning and implementation of the technical assistance components of the Project, including advising in the preparation of work plans and technical reports;
- Provide technical support for the Project implementation of biodiversity and PA related activities and overall mainstreaming of biodiversity into Project activities, and other protected area planning processes and tools, as well as IAS management;
- Provide overall Project technical support and to ensure biodiversity is mainstreamed into Component activities and BD considerations are incorporated into Project decision making
- Support and enhance capacity for BD and the effective expansion of the PA estate, and to support boundary georeferencing / delineation, development of monitoring and tracking programmes (terrestrial/marine assessment, census data), SMART indicators for key project indicators and data collecting protocols. Includes training and department support.
- Support BD mainstreaming in the integrated landscape and BD integrated into the development of monitoring and tracking programmes for SLM, including SMART indicators for key project indicators and data collecting protocols;
- Support capacity building in PA and BD management functions, including research, site / habitat / species management activities and monitoring; and community empowerment, outreach and dispute resolution;
- Support the planning of ecological inventories and conservation programs within PA sites;
- Assist in the implementation of other technical aspects of the project as needed.

<u>Qualifications (indicative)</u>

- Minimum of 15 years of experience in biodiversity conservation, with at least 10 years professional experience related to protected areas
- Experience and knowledge of both terrestrial and marine conservation and protected areas preferred
- Practical experience in similar assignments, preferably with experience in the Caribbean
- Demonstrated leadership ability and technical ability to communicate complex ideas verbally and in writing.
- Previous experience working with a GEF and/or UNDP-supported project
- Self-motivated and ability to work under the pressure;
- Team-oriented, possesses a positive attitude, and works well with others;
- Flexible and willing to travel as required;
- Excellent interpersonal skills;
- Excellent verbal and writing communication skills in English;

SLM/Monitoring Expert

The project SLM Specialist will be responsible for providing technical assistance and support for the operationalization of resilient agricultural practices under the supervision of the Project Manager and will work in close collaboration with UNDP Country Office Planning, Monitoring and Evaluation Analyst and and UNDP Country Office Gender Focal Point. Expert will also work in close collaboration with the Project Gender Specialist. Specific responsibilities will include:

- Provide direction and technical assistance for the implementation and monitoring of SLM practices in the Project target watersheds, working with the Project Gender Specialist ensuring women's participation and access to benefits;
- Assist the Project Manager in the preparation, implementation, coordination and monitoring of an Operational Work Plan and corresponding Annual Work Plans for SLM and climate smart / climate resilient agricultural practices;
- Obtain soil conservation, freshwater and saltwater quality baseline for Project R2R site in the Buccament Watershed and nearshore coastal area, and develop appropriate monitoring systems, linked with the Project supported Central Information Management System, in collaboration with MARFFIL;
- Develop with National Soil Conservation Monitoring Programme and riverbank setback criteria and guidelines, in collaboration with MARFFIL;
- Assist the Project Manager in CSA/SLM technical reporting activities to the GEF, UNDP, and Executing Agencies, ensuring adherence to the Agencies' technical reporting requirements;
- Support CSA demonstration and propagation activities (field and propagation station);
- Assist the Project Communications Expert in collecting and analyzing lessons learned and best practices that empowers women and their participation in Project activities;
- Promote the Project and seek opportunities to leverage additional co-funding at the local level; and
- Represent the Project at meetings and other project-related fora at the local and national levels, as required.

Qualifications (indicative)

- A Bachelor's degree (Master's degree preferred) in areas relevant to SLM and CSA;
- At least 10 years of working experience in SLM or a directly related field, with CSA experience integrated;
- Experience facilitating consultative processes, planning and monitoring at the local level (preferably in CSA and SLM);
- Ability to work both independently and as a member of a team;
- Demonstrable ability to organize, facilitate, and mediate technical activities with multiple stakeholders to achieve stated project objectives at the local level;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in English; and
- Previous experience working with a GEF-supported project is considered an asset.

Project Monitoring and Evaluation Officer

Under the overall supervision and guidance of the Project Manager, the M&E Officer will have the responsibility for project monitoring and evaluation. The M&E Officer will work closely with the Communications Officer on knowledge management aspects of the project. Specific responsibilities will include:

- Monitor project progress and participate in the production of progress reports ensuring that they meet the necessary reporting requirements and standards;

- Ensure project's M&E meets the requirements of the Government, the UNDP Country Office, and UNDP-GEF; develop project-specific M&E tools as necessary;
- Oversee and ensure the implementation of the project's M&E plan, including periodic appraisal of the Project's Theory of Change and Results Framework with reference to actual and potential project progress and results;
- Provide support to the Project Manager in preparing M&E reports required by UNDP and the GEF, indicating, among other things, the progress in complying with the indicators included in the PRF; and
- Prepare the ToRs for the MTR and TE of the Project.
- Oversee/develop/coordinate the implementation of the stakeholder engagement plan;
- Oversee and guide the design of surveys/ assessments commissioned for monitoring and evaluating project results;
- Facilitate mid-term and terminal evaluations of the project; including management responses;
- Facilitate annual reviews of the project and produce analytical reports from these annual reviews, including learning and other knowledge management products;
- Support project site M&E and learning missions;
- Visit project sites as and when required to appraise project progress on the ground and validate written progress reports.

Qualifications (indicative)

- Master's degree preferably in biodiversity conservation, SFM or SLM or other similar areas with a focus on project monitoring and evaluating;
- At least five years of relevant work experience preferably in a project management setting involving multi-lateral/ international funding agency. Previous experience with UN project will be a definite asset;
- Significant experience in collating, analyzing and writing up results for reporting purposes;
- Very good knowledge of results-based management and project cycle management, particularly with regards to M&E approach and methods. Formal training in RBM/ PCM will be a definite asset;
- Knowledge and working experience of the application of gender mainstreaming in international projects;
- Understanding of biodiversity conservation, law enforcement, sustainable livelihoods and associated issues;
- Very good inter-personal skills;
- Proficiency in computer application and information technology.
- Excellent language skills in English (writing, speaking and reading) and in local languages.

Project Gender Specialist

Under the overall supervision and guidance of the Project Manager, the Gender Officer will have the responsibility for the implementation of the Gender Action Plan and gender focus in all of the project activities, and will work in close collaboration with UNDP Country Office Gender Focal Point. Project Gender Specialist will work closely with the M&E Expert, Project Communications/Knowledge Management Expert on related aspects of project implementation, reporting, monitoring, evaluation and communication. Specific responsibilities will include:

- Monitor progress in implementation of the project Gender Action Plan ensuring that targets are fully met and the reporting requirements are fulfilled;
- Work with the M&E officer and Safeguards Officer to ensure reporting, monitoring and evaluation fully address the gender issues of the project;

- Provide expert input to all project activities for gender inclusive planning, implementing and monitoring of all project activities.
- Facilitate and provide inputs in the designing and organizing of all planned project activities to ensure gender sensitivity and participation of boys and girls, men and women equally.
- Ensure the mainstreaming of gender in all training and sensitization activities carried out under the project.
- Promote engagement of girls, boys, women and men and other vulnerable groups to address gender inequities in the project area and target population.
- Responsible for reviewing all data collecting tools related to stakeholders, including the KAPB survey and the socio-economic assessment.
- Mainstream gender and highlight gender aspects while developing training materials, manuals, documentation of case studies and lessons learnt.
- Coordinate with the government departments, NGO and other stakeholders to promote interventions to address gender focus of the project.
- Prepare monthly, quarterly and annual reports for integration in the project reports. Ensure that reports highlight gender aspects of project and provide sex disaggregated data.
- Undertake any other assignment or other project related activities as and when required by the project coordinator

Qualifications (indicative)

- Master's degree in gender studies, gender and development, environment, sustainable development or closely related area.
- Demonstrated understanding of issues related to gender and sustainable development; at least 5 years of practical working experience in gender mainstreaming, women's empowerment and sustainable development in SVG and / or the Caribbean region;
- Proven experience in gender issues in SVG and / or the Caribbean region;
- Previous experience with UN projects will be a definite asset;
- Demonstrated understanding of the links between sustainable development, social and gender issues;
- Experience in gender responsive capacity building;
- Experience with project development and results-based management methodologies is highly desired/required;
- Excellent analytical, writing, advocacy, presentation, and communications skills.
- Excellent language skills in English (writing, speaking and reading) and in local languages.

Communications/Knowledge Management Expert

Under the overall supervision and guidance of the Project Manager, the Communications Officer will have the responsibility for leading knowledge management outputs in Component 4 and developing the project communications strategy at the project outset and coordinating its implementation across all project components. The Communications Officer will work closely with the Project Gender Specialist and the M&E Officer on knowledge management aspects of the project. Specific responsibilities will include:

- Develop a project communications strategy / plan, incorporate it with the annual work plans and update it annually in consultation with project stakeholders; coordinate its implementation
- Coordinate and oversee the implementation of public awareness activities across all project components;
- Develop outreach materials for National Biodiversity Interpretation Center
- Document/ systematize of lessons learnt and best practices.
- Facilitate the design and maintenance of the project website/webpages and ensure it is up-to-date and dynamic;

- Facilitate learning and sharing of knowledge and experiences relevant to the project;

Qualifications (indicative)

- A Bachelor's degree, preferably in the field of community development or natural resource / environmental management;
- A communications qualification (diploma, bachelor's degree)
- At least three years of relevant work experience of communications for project or programme implementation, ideally involving international donors. Previous experience with UN projects will be a definite asset;
- At least 3-5 years of experience in the field of communications or knowledge management, preferably focused on conservation of biodiversity, SLM and/or climate resilience;
- Previous experience in developing and implementing communications strategies for organizations or projects
- Strong professional working capacity to use information and communications technology, specifically including website design and desk top publishing software
- Very good inter-personal skills
- Excellent language skills in English (writing, speaking and reading).

Socio-economic Baseline Survey Consultant

The Consultant will collect and review primary baseline data, both qualitative and quantitative, which will be used to establish the current situation in relation to the indicators in the Project Results Framework. The purpose of the consultancy is to establish a detailed socio-economic baseline in the project target sites which will include 3 Protected Areas (PAs) that include a Forest Reserve, Wildlife Reserve and Marine Park. The baseline will form the starting point for monitoring and measuring results of all activities. The data parameters will include social indicators including but not limited to the following: sex, age, community of origin, natural resources and ecosystem services use, access to and ownership to land, land tenure arrangements, etc. Two key parameters to be established using the baseline survey is income levels and sources of income, income from and use of PEPs. A direct measurement of household income is therefore required. The consultant will carry out the household survey using pre-designed tools (which will be provided to the consultant).

Expected outputs will include the following:

- Collection of socio-economic data using primary and secondary sources at the five sites.
- Preparation of 1 detailed baseline report covering all five sites and answering to requirements linked to specific socio-economic indicators
- Pre-testing of questionnaires and training of assistant enumerators if needed.

- Conduct of field survey including community and household level assessment, structured interviews and data gathering with key informants (KI) and focus group discussions (FGDs);
- Data compilation and organization (including writing up of KI and FGDs) 8. Data decoding and statistical analysis (guidelines will be provided on the format required for the raw datasets and policies governing their use);
- Integrating qualitative and quantitative analysis in an analysis report;
- A Baseline Report that include the following socioeconomic indicators: Human Capital: Household Composition and Size, Assets, Detailed profile of education levels in both male and female, technical skills in fishing farming and other livelihood activities, leadership potential and community involvement, • Natural Capital: access to land, possession of livestock, access to forest, availability of water, access to fish resources, access to biodiversity, soil fertility, water quality etc. • Physical Capital: Ownership of fishing and farming equipment and gear, • Social Capital: formal community organizations, networks, connectedness, relationship of community trust, level of cooperation enjoyed. • Financial Capital: Savings, household assets easily convertible to liquidity, transfers from state, remittances, access to credit.

Competencies

- Strong expertise in survey methodologies both qualitative and quantitative
- Ability to conduct analysis of qualitative and quantitative data
- Experience in conducting national/regional level survey
- Familiarity with the livelihoods and gender assessments
- Familiarity with GEF projects design and Results Frameworks

Qualifications (indicative)

- Master's degree or higher in social or environmental sciences, or other relevant field;
- Minimum 3/5 years of demonstrable experience in conducting baseline surveys Demonstrable experience in supporting UNDP/GEF project design would be an asset.
- Minimum 3/5 years of demonstrable experience in livelihoods and livelihood-based interventions and assessments
- Demonstrates ability of analytical work and excellent report writing;

ANNEX E. UNDP SOCIAL AND ENVIRONMENTAL AND SOCIAL SCREENING TEMPLATE (SESP)

Project Information

Project Information	
1. Project Title	Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach
2. Project Number	5862
3. Location (Global/Region/Country)	St Vincent and the Grenadines

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the Project mainstreams the human-rights based approach
The rights of local stakeholders will be ensured through the development of stakeholder participatory plans developed through consultative processes during the PPG phase and implemented throughout the project cycle. Equity amongst stakeholders is ensured by the national consultative processes and established criteria used for selection of target sites for project interventions which are outlined in Annex K, and target beneficiary groups that will be selected through a participatory approach during Project implementation (Output 3.3). The project, through its interventions, will promote environmental and social sustainability for local stakeholders, especially socially and economically vulnerable and marginalized populations. Some of these interventions include: a) Increased awareness by farmers about climate smart agriculture, protected areas, watershed management as well of biodiversity and conservation values; b) participatory management planning (gender inclusive) for PAs and integrated watersheds natural resource management planning, c) Implementation of SLM and biodiversity friendly production practices, amongst others. There are no indigenous peoples in the project intervention areas or that may be impacted by indirect, secondary, or induced impacts from this project.
Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

The project gender action plan will ensure that gender issues are integrated into the entire project cycle including project preparation, formulation and implementation ensuring that gender equality and women's empowerment are fully actioned. The project will further ensure that all project activities, social impact indicators and corresponding targets are gender-sensitive and that women and men receive equitable share of benefits. The project with further ensure that women participate in all of the project activities, such as SVG Network of Rural Producers, including decision making, their status and interests are not marginalized or diminished, and that women or their representatives are able to present their interests effectively thereby empowering women in the natural resources sector. The Project communication strategy will be developed to ensure that information disseminated by the project reaches women equally and specifically addresses their concerns and interests, i.e. that women have an equal access to information. The Project will also engage a Community Outreach Specialist that will work with the Project Gender Specialist to ensure that women, including women in rural communities, are engaged in both the consultative process and are provided opportunities to benefit from Project related activities and incentives, including Project supported sustainable livelihood initiatives.
Briefly describe in the space below how the Project mainstreams environmental sustainability
The project will support practices that incorporate BD and LD into the agricultural sector and into integrated watershed planning and management, working with both local producers and national institutions to strengthen capacity for SLM, CSA and BD conservation. BD will also be mainstreamed into strengthened multi-sectoral policies and legal / regulatory frameworks for integrated land use planning, both nationally and within the target landscapes, to minimize land degradation and maximize environmental sustainability. Furthermore, the Project will support the strengthening of capacity at the producer and agro-processor level (including women) that will further support mainstreaming of environmental sustainability into production practices. The Forestry Service, through project support for resources (i.e. satellite images and drone technology), will be supported to maintain PA borders and monitor these boundaries, including those in more inaccessible areas, over time.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks?	**QUESTION 3: What is the level of significance of the potential social and environmental risks?**			**QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?**
Risk Description	***Impact and Probability (1-5)***	***Significance (Low, Moderate, High)***	***Comments***	***Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.***
Risk 1: There is a risk that limited institutional capacities might result in unintended impacts to BD conservation and SLM in the target landscape. *Principle 1 (Q5). There is a risk that duty-bearers do not have the capacity to meet their obligations in the Project.*	I = 3 P = 2	Moderate	The Project will be positively impacting capacities and biodiversity conservation and SLM. An assessment during the PPG phase shows that there are constraints in capacities. Individual capacities exist, but institutional capacities in terms of insufficient financial resources and understaffing are present. Because there are existing individual capacities amongst key institutional stakeholders, the potential impact of the unintended risk to impacting BD negatively would be 3 (I = 3). The probability would be 2 because of the presence of individual capacities within key institutions and because limited institutional capacities (insufficient	Project activities will strengthen capacities of national institutions. The project will positively impact capacity. The project will finance capacity strengthening at the institutional, community and producer level. Targeted capacity building will be based on capacity needs identification during the PPG phase, and a detailed capacity needs assessment and capacity development plan to be developed during year 1 of project implementation (Output 1.5). This capacity needs assessment and capacity development plan will also address capacity gaps identified in the Capacity Development Scorecard, including low capacities for management and implementation, to generate, access

			resources and staffing) exist in only some of the institutions supporting implementation of the Project.	and use information and knowledge, for strategy, policy and legislation development and for monitoring and evaluating. Training will be implemented to address priority capacity needs identified during the capacity needs to support the achievement of project outputs and outcomes (see output 1.5). Furthermore, measures to address potential risks of capacity constraints are embedded into the project design. Measures will be put in place to avoid any potential risk associated with implementing SLM measures (i.e. reforestation) on steep slopes, including technical advice and supervision provided by the Project SLM Expert and the hiring of a Forester (Output 3.1, Budget note 18) to support the Forestry Services and supervise plantation management and reforestation activities and Field Assistants. Though a risk is of a small scope (area), the Project will be implementing guidelines and supervision by specialist during implementation of reforestation activities to ensure measures implemented only enhance slope stability (see output 3.1 and Budget note 19).
Risk 2: Women might not fully participate and contribute to design and implementation and might not have equal access to project benefits. *Principle 2 (Q2). There is a risk that the Project may potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?*	I = 3 P =2	Moderate	Women are involved in agriculture, where approximately 30% of farmers and over 50% of agroprocessors are women, thus the potential impact would be 3 (I=3). The probability would be 2 (P=2) because women participate in the sector and have and will be concerned and interested in the project proposal and project activities. Though women not fully participating or contributing to design and implementation and not having equal rights to project benefits would negatively affect the positive impacts, in this Project it is a low risk.	Project activities will ensure that both women and men are able to participate meaningfully and equitably, have equitable access to Programme and Project resources, and receive comparable social and economic benefits. A Gender Analysis and Action Plan has been developed (Annex G) which is incorporated into Project design. The Project will also promote gender equality and the empowerment of women and will seek to reduce gender inequalities in access to and control over resources and the benefits of the Project Programmes and Projects, also furthering the availability of gender disaggregated socio-economic and livelihood data.
Risk 3: Project activities will take place within and adjacent to critical habitats and environmentally sensitive areas (proposed PA)	I = 3 P = 1	Low	All Project activities have been designed to improve environmental sustainability and to preserve conserve biodiversity. Project activities to implement SLM on steep slopes are to reduce land degradation and the negative impacts of sedimentation, are of a small scale (ha) with minimal potential to cause adverse impacts (Risk 1 above). Species census, biodiversity assessments,	

Principle 3 (Q1.2). Project activities are proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities			and IAS control to reduce threats to key species in critical habitats are also all designed to ensure only net positive impacts to biodiversity and will all be implemented by biodiversity specialists. The potential impact is three (I = 3), and the probability is 1 because only a small portion of the Project activities will be taking place within or adjacent to these environmentally sensitive areas or critical habitats. See also Risk 4 related to reforestation activities.	
Risk 4: The project's support of active reforestation of degraded areas in and outside of the proposed PA is implemented unsustainably. Principle 3 (Q1.6). The Project does involve harvesting of natural forests, plantation development, or reforestation	I = 1 P = 2	Low	Active reforestation of degraded areas will have a net positive impact on biodiversity conservation and on overall environmental sustainability and will reduce land degradation. The Project will support small scale reforestation efforts using BD- and LD-friendly practices and only native species, and conversion of non-native / agroforestry plantation to native species in and adjacent to the proposed PA and critical habitats. No harvesting of natural forests or plantation development will take place. Reforestation activities will take place within the proposed protected area (Forest Reserve) and only use native species, will support conservation aims and effective management of the area as identified by government managers. Given the experience of the Forestry Services and the Project supported expertise of an SLM expert, there is a very low probability (P=2) of measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated or on the ecological processes supporting those biodiversity values. Outside of the proposed PA and critical habitats, reforestation of degraded areas will use both native species and / or multi strata mixed agroforestry systems to improve LD and BD in non-sensitive areas. No invasive species will be used. The impact level is assessed as 1 because of the techniques and species being used (only native species in and adjacent to the PA and critical habitats, no invasive species anywhere) (Output 3.1 & Budget note 19).	
Risk 5: The Project involves the harvesting of the exotic invasive	I = 1 P = 1	Low	The Project will be engaging in the removal of only this highly invasive exotic species and predator	

Indo-Pacific Lionfish *Pterois volitans* within the proposed marine PA. There is a risk that other species could be inadvertently harmed during this activity. *Principle 3 (Q1.7) The Project involves the production and/or harvesting of fish populations or other aquatic species*			which can only improve marine biodiversity by reducing predation. As Lionfish are only harvested by spearfishing, where each individual is targeted, which are highly distinguishable from other fish species, and as such, the potential inadvertent impact of this activity is 1 (I = 1), and because of the method of harvesting, the probability is also 1 (P = 1). This work will follow an invasive species management and control program (output 2.2.2), to be developed by the project.	
Risk 6: The Project involves the grading of an existing government dirt access road to support SLM activities (plantation management) and the building of a hut for CSA interpretation materials. There is a risk that these activities could result in adverse environmental impacts. *Principle 3 (Q1.11) Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?* *Standard 7. (Q7.1) Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?*	I = 1 P = 5	Low	Road maintenance activities (grading of an existing dirt road will take place (P=5) will be implemented through Project co-finance activities but will be of no or negligible impact (I = 1) as the Forestry Services (FS) access road is already existing, is already maintained, is not near critical habitats or water bodies, and is not in the vicinity of any communities. It is only used by the Forestry Services, and its entrance is controlled by a staffed interpretation center, limiting unintended expanded uses. Furthermore, the dirt road is already maintained by government, and only grading might take place (as needed). Additionally, the scope of this activity is limited spatially (in only one location and over a small area (approx. 100 ft) and will take place over a short period of time, and thus will have negligible impacts (i.e. dust, erosion, pollution). The interpretation hut is outside of the proposed Forest Reserve and will use existing logs, already on site, from non-native species previously harvested by the government, is also of limited scope (one location over a small area and over a limited period of time), is small (approx. 150 sq ft), not enclosed, requires limited material transport to site, and as such has negligible potential impacts for pollution. As described in Risk 3 (above), the Project adopted a precautionary approach to natural resource conservation as promoted by UNDP, and the Project design is based on avoidance of any adverse environmental impact, which includes avoidance of activity detrimental to critical habitats and	

			environmentally sensitive areas. Activities will be supervised by the Project SLM Expert, with activity planning technical input from the Project CTA/Biodiversity Specialist (Output 3.1) prior to the initiation of the Project activities.	
Risk 7: The project is supporting activities that promote SLM and BD conservation, including increasing the PA estate and biological / landscape connectivity, and climate resilient agricultural practices. However, climate change-related risks and impacts to the Project may take place, including impacts of extreme climatic events (such as heavy rains can cause erosion on steep slopes, landslides and downstream flooding) to Project interventions and outcomes that can potentially have adverse impacts on biodiversity, watershed ecosystem services and livelihoods. *Principle 3 (Q2.2). The potential outcomes of the Project are likely to be sensitive or vulnerable to potential impacts of climate change*	I =3 P = 3	Moderate	The Project is supporting activities that promote biodiversity conservation and sustainable land management which includes climate resilient agricultural practices. Project activities, such as SLM and CSA, are designed to help reduce the potential impacts of climate change, but the Project outcomes are still vulnerable to the adverse impacts of climate change, particularly extreme climatic events. The potential impact is 3 (I = 3) because of the steep slopes in Project intervention areas and due to the extent of these slopes in the upper watershed areas. The probability of this risk is 3 (P = 3) because of the observed trends in climate changes with regard to rainfall and recent extreme climatic events (see ProDoc Para 4)	The Project will promote overall ecosystem and community resilience through BD and SLM practices. Strengthened ecosystem integrity through an expanded PA estate and increased biological connectivity will increase overall resilience to the impacts of climate change. Strengthening technical capacity and increasing effective use of climate-smart farming practices, soil conservation (Output 3.2) and SLM in upper watershed areas (Output 3.1), including reforestation with native species only, plantation management, and riverbank stabilization, will improve CC resilience across target ecosystems. Steep degraded slopes will be stabilized through reforestation and soil conservation measures thus reducing their vulnerability to erosion and landslides, and related impacts to nearshore coastal marine areas through flooding and siltation.
Risk 8: The project is supporting government in the development of guidelines for riverbank setbacks, for farmers who cultivate lands close to the riverbank, increasing the likelihood of erosion. There is a risk that these farmers will not be able to cultivate on this portion of their land.	I = 3 P = 2	Moderate	Riverbank setbacks, already being implemented by government, are being done with no set guidelines, and while setback might limit the land use options for some farmers over a limited area, this will not lead to any displacement, neither physical nor economic because of the limited scale (ha) of this activity. Regulations are already in place and enforced by the Forestry Services at both proposed terrestrial PAs, and the Project support for the gazette process will not incorporate additional resource use restrictions. The Project will be supporting the designation of the Leeward Coast Marine Park but is not participating in the Marine	The project will recruit a Gender Equality and Socio-economic Development Expert to carry out a baseline socio-economic and livelihood assessment during Year 1, prior to the start of the relevant project activities. This survey will inform the development of a Livelihood Action Plan (Output 1.2, Budget note 2) as well as management plans that will incorporate livelihood needs. No economic displacement will take place unless unavoidable and only then will be carried out in line with the Livelihood Action Plan.

Standard 5 (Q5.2). Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?			Park site management planning, which would include fisheries and is outside the scope of this project. Conservation Zones will be delineated as part of this Project, identified by, and in full collaboration with, resource users. These activities will only be initiated after the socio-economic and livelihood survey / analysis and Livelihood action Plan is developed. As such, the impact will be moderate (I =3) and the probability is also small (P=2) as only a small proportion of resource users may be affected.	

QUESTION 4: What is the overall Project risk categorization?

Select one (see SESP for guidance)		Comments
Low Risk	☐	
Moderate Risk	☑	Project activities aim to improve BD conservation, reduce land degradation and increase climate resilient agricultural production in environmentally sensitive ways. Project activities will not lead to increases in environmental impacts rather will result in overall positive environmental and social sustainability. However, limited institutional capacities might limit the project impact in terms of BD conservation and SLM in the target landscape. Project activities, such as SLM and CSA are designed to help reduce the potential impacts of climate change, extreme climatic events (such as heavy rains can cause erosion on steep slopes, landslides and downstream flooding) can adversely impact biodiversity, watershed ecosystem services and livelihoods, including those supported through Project activities.
High Risk	☐	

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?

Check all that apply		Comments
Principle 1: Human Rights	**X**	Limitations in institutional and stakeholder capacity may result in sub-optimal implementation of project interventions but, based on their assessment through the UNDP Capacity Development Scorecard, individual and institutional capacities in place are adequate for a successful implementation of the project. Therefore, probability of adverse impacts due to limited institutional capacities is expected to be low. The assessment carried out during PPG phase will be followed by a more thorough capacity needs assessment and capacity development plan, to be developed during Year 1 of Project implementation. This plan will identify institutional and stakeholder training programmes to be implemented during the Project. Furthermore, an SLM Expert and a CTA/Biodiversity Expert recruited through the Project will provide technical and supervisory support to relevant project stakeholders and beneficiaries.

	Principle 2: Gender Equality and Women's Empowerment	**X**	A gender analysis has been conducted and the resulting Gender Action Plan will be applied during the project implementation.
	1. Biodiversity Conservation and Natural Resource Management	☐	
	2. Climate Change Mitigation and Adaptation	**X**	Extreme weather events may impact the SLM, BD conservation and CSA activities. However, the Project approach is to support the integration of SLM and CSA approaches into land management and production practices to limit the impacts of climate related events.
	3. Community Health, Safety and Working Conditions	☐	
	4. Cultural Heritage	☐	
	5. Displacement and Resettlement	**X**	A socio-economic and livelihood assessment and Livelihood Action Plan (Output 1.1.2) for proposed terrestrial and marine protected area sites will be developed during Year 1 of Project implementation to avoid – and, where avoidance isn't possible, mitigate – the risk of economic displacement.
	6. Indigenous Peoples	☐	
	7. Pollution Prevention and Resource Efficiency	☐	

Final Sign Off

Signature	***Date***	***Description***
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases, PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

Checklist Potential Social and Environmental Risks		SVG
Principles 1: Human Rights		**Answer (Yes/No)**
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? [104]	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	Yes
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Yes
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	No
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Yes

[104] Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals .

1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	Yes
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	Yes
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? *For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.*	Yes
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant[105] greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	Yes
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	No
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No

[105] In regards to CO_2, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Yes
5.3	Is there a risk that the Project would lead to forced evictions?[106]	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.*	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	No

[106] Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol*	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

ANNEX F. STAKEHOLDER ENGAGEMENT PLAN

Introduction

The Government of St. Vincent and the Grenadines is implementing several baseline initiatives aimed at Protected Areas (PA) management, Sustainable Land Management (SLM) and Biodiversity conservation. In concurrence with these initiatives, the Ministry of Agriculture, Rural Transformation, Forestry, Fisheries and Industry is in the process of preparing a project proposal for the GEF 6 cycle for the conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach project. This project aims to enhance biodiversity conservation and ecosystem services conservation through an expanded and strengthened PA system and with SLM measures integrated in a ridge to reef approach. In order to achieve this, the project will focus on the following objectives

1. Improving the financial sustainability and effective management of the national ecological infrastructure.
2. Improve sustainability of protected area systems,
3. Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate
4. Reduce pressures on natural resources by managing competing stakeholders
5. Scaling-up sustainable land management through the Landscape Approach.

To achieve its objectives the project has the following major components:

Component 1: Strengthened institutional framework for Protected Areas, Ecosystem Conservation and Sustainable Land Use
Component 2: Establishment and effective management of new and existing PAs
Component 3: Integrated watershed management measures in Ridge to Reef setting to reduce threats to upstream PA and downstream Marine Protected Areas/Marine Managed Areas.
Component 4: Knowledge management for SLM, Climate Smart Agriculture (CSA) and biodiversity conservation.

Stakeholder Engagement Process Framework

The project will adopt a multi-stakeholder engagement process consisting of four progressive stages (Figure 1). The output of each stage enables the subsequent stage, with a progressively wider group of stakeholders participating at each stage. Adequate representation of the diversity of perspectives and interests will be ensured throughout the process making it effective and transparent. At the onset of the process, when the number of stakeholders involved is smaller, care will be taken to ensure that the diversity of interests related to the issues are represented as best as possible.

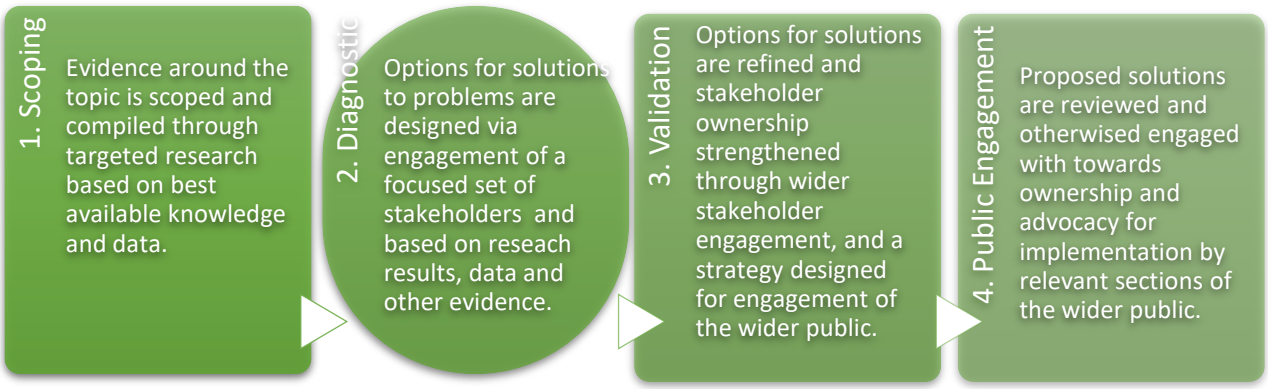


Figure 1: Stages of the proposed stakeholder engagement process.

Scoping

In the scoping stage, research and data collection activities will assist in the development of fact base on the issue to be addressed throughout the process. This stage will deliver information about the key stakeholders related to the issues, and any segmentation based on their roles, interests, perspective on the issue and other factors. This will involve the conduct of research based mostly on data from secondary sources and key informants but augmented as necessary with primary data collection. Emphasis was placed on ensuring that duly qualified persons conduct the research and that is was objective, comprehensiveness, and cost effective. This was achieved through due diligence in recruitment, planning research, and reviewing outputs thereof.

Diagnostic

This phase requires wider engagement on the issue and is informed by the research and data from the first stage. This stage will involve participation by a core set of stakeholders, who have the closest relationship to the issue. This group is diverse, but it is anticipated that, owing to their strategic role in the sector, several key stakeholders would need to participate regardless. The intention of engagement at this stage is collaborative identification of high priority issues and the design of options for evidence-based solutions to the project. Ideally, all the key stakeholders who are expected to implement the solutions should be involved at this stage, but it is recognized that participation of these stakeholders at this stage would best be through representatives. It is therefore essential that these representatives ensure adequate interface with their constituents to ensure proper representation from an informed position. At this stage “buy-in” and ownership by the stakeholders is secured.

Validation

The third stage of the stakeholder engagement process is validation, where the options for solutions discussed at stage 2 will be discussed with a further expanded group of stakeholders for validation and refinement. This stage will strengthen the proposal and determine the design and focus of the public engagement process towards finalization of the proposed solutions. This stage should also further build stakeholder ownership of the solutions and stir individual and joint action for implementation by stakeholders. The main activity of this stage is the proposal validation workshop, which will seek final inputs from the main stakeholders regarding the project design and associated activities.

Public Engagement and Communication

The final stage of the stakeholder framework is ensuring public engagement with the proposal for wider support, input for its implementation and ownership for its sustainability. This stage will provide key information to support the implementation of the solutions through critical public feedback mechanisms. A variety of mechanisms, tools and media will be utilized at this stage to reach as wide a cross section of the public as is possible. Attention will be placed on ensuring that stakeholders to be most impacted by implementation of the solution are fully engaged at this stage to augment informed representation, which would have been made on their behalf in the earlier stages.

It recognizes the limitations of official representations and attempts to ensure that all that are impacted or affected are aware of the project activities and given an opportunity to have an input.

Engaging stakeholders early, often, and through participatory means are key to ensuring and maintaining transparency and building and sustaining trust. The process will be implemented iteratively to design solutions for each of the issues identified as priority to be addressed throughout the project. This process for arriving at decisions or results by repeating rounds of analysis to achieve the desired solution is critical, especially in cases that require changes in public or private policy to be addressed.

Objectives of the Stakeholder Engagement Plan

1. To identify the roles and responsibility of all stakeholders and ensure their participation in the complete project cycle
2. To input the knowledge, experience and skills of stakeholders to enhance the design and implementation of the project
3. To devise a plan of action that clearly identifies the means and frequency of engagement
4. To allocate budgetary and other resources in the project design, project implementation and monitoring and evaluation for stakeholder engagement and participation

Stakeholder Engagement during the design phase – PIF and PPG

A wide cross section of stakeholders was consulted during the PIP and PPG stage of the project preparation (list of consultations attached in appendix 1). There was a PPG workshop that included a wide number of governmental and non-governmental stakeholders. The workshop sought input from the stakeholders on the project design, proposed components and the defining of project activities. The workshop was led by the PPG lead consultant, subject expert and personnel from the UNDP. In addition to the workshop, the PPG team also consulted extensively with governmental technical staff, members of civil society, NGOS and CBO's.

During the PIF stage, a mission was conducted by the PIF consultant during the period, **May 23-27, 2016. The organisations or group consulted and the focus of the consultations are listed below:**

Organization/Person	Summary of Consultation
1. Ministry of Economic Planning and Sustainable Development	• The expression for the need of a central repository data system to prevent duplication, overlaps and inefficient use of data. The need for a physical and planning GIS Unit, thereby ensuring the generation of maps and geo data. Possibility of revisiting the GAP Analysis for the remaining needs for the inventory on biological resources. • The need for an Emergency Telecommunications
2. Forestry Division -Mr. Fitzroy Providence	• Field Trip to Troumaca and Cumberland. • Threats to forestry management discussed, e.g. erosion, deforestation. • Opportunities for forest management livelihoods, e.g. high value bee-keeping. • Implementation of Forestry Policy. • Threats: Encroachment: was Banana, now Marijuana (shifts, very dynamic, shifting), • Dry ecozones: wild fires
3. Mr. Howie Prince - National Emergency Management Office(NEMO)	• Emergency telecommunication network – link all gov. agencies, reduce redundancies. Efficient national communication – use modern technology – platform for early warning, network communities. • COMMs infrastructure: co-location of towers of local providers, ICT, software, licenses, radio data system. • Cater for gov. 911 emergency • More training aspects – Drought, flood risk management – train the trainers of line ministries.
4. Ministry of Agriculture Lawyer-Ms. Subudo, Ashley Caine – Chief Agricultural Officer, Colville King	• Regulations for Wildlife Protection Act and Forestry Act. • Traditional practices: contour planting, grass planting for livestock • Some good practices evolved (including in banana fields). When banana industry shrunk fields were abandoned or turned to root-crop. Root-crop planting technique spurs erosion (whole dug, soil set aside and loose, washed down).

	• On the positive: root crops require less pesticides • Land use planning: Physical planning, lacks overall SVG zoning. On private land, land use change is not tracked (from agriculture land to house) • Public education – science and tech, including understanding soils, pests, etc.
5. Mr. Anthony Bowman – Director of Physical Planning	• Montreal watershed feeds Cumberland and Kingstown • Deals with Crownland – Chief surveyors needs to come on board, has to intervene for demarcation of areas. • 1000 contour, elevation – no development planning should take place – tries to maintain (was designated for water resources and wildlife). Lands and Surveys Dept. can provide maps and info on what is available. • Outside Kingstown: landslide area, Tonja system: plant trees, intercrop but need to allow forest regeneration. Use introduce species, to create first cover and let natural generation happen. • GCCA- Physical Adaptation pilot. Livelihood focus. • Existing Watershed management plan in Cumberland to apply in Perseverance
6. Mr. Recardo Frederick – BAM Coordinator – Banana Accompanying Measures (Agricultural Modernization Development programme	• Soil conservation and management, pest control • Leather making • Protective agriculture (shade houses – fruits and veggies) – food security, nutrition • Green house in Montreal. • Climate resilient varieties • Waste disposal, food bath (avoid transfer of diseases) • Food Science Lab – food agro-processing, training young people (sauces, chips, jams) – export requirement. • Food lab – training centre, offer services to farmers, ta Community College, tech Division
7. SVG Chamber of Commerce	• Learning Agro-ecology and Agroforestry Networked Demonstration: started last year • Business incubation: business planning, • Crowd funding approach: kick-starter, inedigogo funds., kiva (microfinance) • Proceed from tribe (retail place): social investment fund for agro-processors. • So far 20 farmers. • Retail space want to have own investment fund, social platform, be self-sufficient. • Salvaterra - Colombian org
8. Kristie Shortte – Sustainable grenadines	• Natural Water resources unit in CWSA shares data with other agencies. • Field Trip to Union Island. • Meeting with environmental groups • Visits to the site where the endemic lizard finds habitat. • Other site visits.
9. Kenneth Williams – Marine Park Community Field Officer, Community Development	• Natural Water resources unit in CWSA shares data with other agencies. • Field Trip to Union Island. • Meeting with environmental groups • Visits to the site where the endemic lizard finds habitat. • Other site visits.
10. Sydney Dallas – Treasurer Southern Grenadines Water Taxi Association	• Natural Water resources unit in CWSA shares data with other agencies. • Field Trip to Union Island. • Meeting with environmental groups • Visits to the site where the endemic lizard finds habitat. • Other site visits.
11. Fisheries Division and Fisherfolk Association	• Management plan, drafted regulation to upgrade from conservation area to marine park. • Draft stage. PR campaign, fair. • 5Cs proposal on beach accretion – put structures in place, improve water quality (water treatment plant), reforestation (trees, mangroves, grass on riverbank). • Fishing not allowed, but there is landing sites. No on-site management office. Young island resort, CATS SC still functions (comms network) • Set up a watershed committee • Needs: setting up office space and staff, wardens. Zoning (yachting, hotels), further upstream SLM. • Sandy bay, Big Sand

	• turtle conservation needed in East coast esp. – turtle slaughtering happens (esp. leatherback, cultural aspects – man believe gives power, March to July close season), • West coast Marine Conservation area; proposed for Marine conservation. Heavy fishing most of fishing grounds. • Threats: Lionfish. Lionfish derby – competition (invite public to taste it). Menu in some restaurants – Cumberland • ECCMAN will train fishers (catching and marketing).
12. National Parks, Rivers, Beaches Authority- Andrew Wilson	• Water quality issues, intakes: • General reduced water sources. • Only surface water, main spring in Montreal springs: • 2 wells in St. Vincent: Buccament, Overland (East coast) • Needs water quality monitoring: • Current lab: basic chemicals, phosphate, nitrates • New Montrose head office • Public health samples in community: turbidity, PH, residual chlorine – distribution system. Collaborate with CWSA • Equipment over 30 years old – need new and to expand parameters • Sediment loads are increasing – need to monitor sediment level. • Perseverence, Jenine valley – use natural send filters (chambers) • Send cost estimate, training needs • Monitoring system: • Direct use: informs function of treatment system (too
13. CSWA BAM Coordinator – Banana Accompanying Measures (Agricultural Modernization Development programme)	• Water bottling companies operate some intakes. • Grenadines more rain water harvesting – OECS Reducing Risk and Climate Change (RAC) projects – rainwater tanks. In shelters – 6 shelters – more in Windward side. • PES • Integrated Forestry management Programme: 90s • CWSA, Forestry • CWSA provided financial support to Forestry for forest management, looked at farming • No current Pes scheme, opportunity in Vermont • Drought problem: need wells
14. Chris Adams – Fisherfolks	• Meeting with environmental groups • Visits to the site where the endemic lizard finds habitat. • Other site visits
15. Victor Hipperland- Sustainable Development Org.	• Field Trip to Union Island. • Meeting with environmental groups • Visits to the site where the endemic lizard finds habitat.
16. Peter Eagles- Fisherfolk and Seafood	• Part of Meetings with environmental groups • Visits to the site where the endemic lizard finds habitat.
17. Roseman Adams- Union Island Environmental Attackers	• Part of Meetings with environmental groups • Visits to the site where the endemic lizard finds habitat.
18. WINFA – Winward Islands Farmers Associations (St. Lucia, SVG, Grenada, Dom)	• Post harvesting initiative – storage facility to supply on low season • Fair trade certification for banana and coconut: Fair Trade farmer. 2006 Banana industry was transitioned to fair trade. WINFA is a fair-trade certifier. CLAC: LAC • Coordination needed on produce sale: volume, markets • Cocoa producer association started, supported by WINFA • Need support producer organizations, need to engage producers and agro-processors. • Cocoa helps SLM – deep root, intercropping • Flooding. Deforestation in the top, farming in riverbank. Squatting. When flooded lots of logs came down. • Needs buffer zone on riverbanks, use of toxic chemicals. • No specific organic regulation. WINFA has been promoting organic, cannot do because next door spraying is done by gov, or by plane. • Pushing for organic certification for Caribbean, international criteria do not fit, e.g. buffer zone int. is way too big, does not fit to small island.

	• Conversation with Dominica organic association (coconut oil).

In addition, a number of stakeholders were further consulted during the inception workshop of the PPG stage and on missions by the various consultants. These stakeholders in addition, to the ones stated above are:

Stakeholder	Summary of Consultations
National Trust	The discussions centred on the implementation of several environmental and historic preservation projects in SVG which overlaps with some of the project activities. The organization also has a number of volunteers and member with technical skills, which can be utilized for project activities.
National Council of Women SVG An umbrella organization that has members that are a network of women's organizations in the country. Presently implementing some backyard gardening project. Provides gender perspective of rural women and women organizations on biodiversity conservation and sustainable land management.	The status of women in SVG in general and their participation and involvement in the natural resources and agricultural sectors. The present projects the organization members are engaged in. The impacts of domestic and other forms of violence against women in SVG. Needs Assessment of the organization was done.
Network of Rural Women Producers An organization of women engaged in agriculture and agro-processing and dedicated to sustainable rural development and gender empowerment and equality in the agricultural sector. A member of the Caribbean Network of Rural Women Producers	Presents projects the organization is engaged in. The needs of the organization and capacity to participate in the project including. Needs Assessment of the Organization was carried out.
CALFICO A local fisherfolk NGO based on Windward side of the island of St Vincent	Presents projects the organization is engaged in. The needs of the organization and capacity to participate in the project including a gender institutional assessment. Needs Assessment of the Organization was carried out.
CYEN is the local arm of the regionalnon-profit, civil society, charitable body that focuses its resources on empowering young people and their communities to develop programmes/actions to address socio-economic and environmental issues.	Presents projects the organization is engaged in. The needs of the organization and capacity to participate in the project including a gender institutional assessment. Needs Assessment of the Organization was carried out
Buccament Development Organizations A network of Community Based Organization for the Buccament Area whose common purpose is the social and physical development of the area.	Presents projects the organization is engaged in. The needs of the organization and capacity to participate in the project including a gender institutional assessment. Needs Assessment of the Organization was carried out
St Vincent and the Grenadines Preservation Fund The St. Vincent and the Grenadines Preservation Fund (SVGPF) gives support to local sustainable initiatives geared at conserving the delicate ecosystem of the islands and to ensure that its natural beauty is sustained through the ages. The Fund advocates for the protection and preservation of the environment and the wildlife of the island archipelago in the Southern Caribbean.	Presents projects the organization is engaged in. The needs of the organization and capacity to participate in the project including a gender institutional assessment. Needs Assessment of the Organization was carried out

A validation workshop was held on May 25, 2017 to present the draft project proposal and seek the endorsement of the major stakeholders on the project design and activities. The following organizations were engaged in the project review: **Participants Engaged in Project Review; Second Mission, May 22**

Name	Organization
Roger Young	Ministry of National Mobilization
Keduali Crichton	Physical Planning
Gerthem Bascombe	Soil Conservation, Min of Agriculture
Celena McDonald	Forestry

Anthony Simon	Forestry
Barry Williams	Forestry
Cornelius Richards	Forestry
Bernard Maloney	CWSA
Sharie Roberts	Ministry of Finance
Jeremy Searles	Fisheries
Michael Dalton	IICA
Allan Williams	Ministry of Agriculture, (Apiculture)
Winfield Tannis-Abbott	CALFICO
Tasheka Haynes	GEF SGP
Andrew Wilson	National Parks Authority
Janeel Miller	Sustainable Development Unit

Stakeholder Engagement and Participation Approach

Stakeholder engagement will be held according to the following principles identified as critical by the UNDP stakeholder engagement guidelines:

Principle	Stakeholder participation will:
Adding Value	Be an essential means of adding value to the project.
Inclusivity	Include all relevant stakeholders.
Accessibility and Access	Be accessible and promote access to the process.
Transparency	Be based on transparency and fair access to information.
Fairness	Ensure that all stakeholders are treated in a fair and unbiased way.
Accountability	Be based on a commitment to accountability by all stakeholders.
Constructive	Seek to manage conflict and promote the public interest.
Redressing	Seek to redress inequity and injustice.
Capacitating	Seek to develop the capacity of all stakeholders.
Needs-Based	Be based on the needs of all stakeholders.
Flexible	Be designed and implemented in a flexible manner.
Rational and Coordinated	Be rationally planned and coordinated, rather than ad hoc.
Excellence	Be subject to ongoing reflection and improvement.

Stakeholder Engagement Plan

The vigorous and extensive stakeholder consultations and engagement that began during the PIP phase will be continued throughout the project cycle. To achieve this the project design has several mechanisms. Among these are:

1. Project Inception Workshop

The project inception workshop presented the official project document and contract to both direct stakeholders and the public. The project inception is also the official launch of the project and presents stakeholders with the work plan of the project. The inception workshop is the final display of commitment to the project before stakeholders begin to delve into the activities of the project.

2. Project Steering Committee

The PSC is the main governance body of the project that will ensure the continued participation of key stakeholders in the project planning, implementation and M & E. The Project Steering Committee (PSC) will be comprised of representatives of the governmental agencies, private sector and special interest groups. The PSC will approve the work plans, be represented on recruitment processes and provide overall strategic guidance to the project.

Whilst it is expected that the Ministry of Agriculture, Rural Transformation, Forestry, Fisheries and Industry (MARTFFI) will lead the project implementation and chair the PSC, others may chair at different stages of the project cycle in an alternating situation. Other stakeholders may also be invited to participate in meetings of the PSC, during which strategic guidelines and work plans will be discussed, negotiated, and approved by executing parties. During the initial phase of project implementation, agreements will be made regarding the development of each of the expected activities MARTFFI will take the lead for most of the activities, and may include other institutions as partners in the implementation of the activities based on their roles and mandates within the environmental, forestry, natural resources, agriculture, agro-processing, financial and other sectors related to the project.

3. Project Coordinating Unit

The PCU is the operational center of the project and has direct responsibility for its implementation. The PCU is responsible for the implementation of the stakeholder engagement plan, communications plan, gender mainstreaming plan, grievance redress mechanisms and monitoring and evaluation. Led by a Project Manager who receives guidance from the PSC, the PCU ensures the participation of all stakeholders and addresses stakeholder conflicts.

4. Communications and Dissemination of Information

The Project Coordinating Unit (PCU) will implement a stakeholder's communication plan to ensure efficient communication with all stakeholders. The medium will be stakeholder specific and utilize both traditional methods such as meetings, telephone calls with newer methods such as a listserv, WhatsApp broadcast messaging, SMS, etc. Attention will be given to jargon free language and translation of technical information into local dialect for local stakeholders. The unit will engage the services of communication specialists to achieve the objective of the plan. Additionally, the PIU will have an active knowledge management with the documentation of processes and lessons learned which will be shared with all stakeholders. There is an entire component of the project that is devoted to knowledge management.

5. Local Committee/s to facilitate local stakeholder participation.

Local project committees will be established at the village/watershed level for the three watersheds where project activities will be implemented. These will provide mechanisms for the project to share approaches and strategic actions with local stakeholders, and, at the same time, provide a forum in which stakeholders can express their concerns, interests and suggestions on the project activities. It will also encourage participation in the project activities and enhance local ownership.

6. Gender Mainstreaming Plan

This will secure the involvement of both gender but especially women that are often marginalized, address the impacts of project activities and account for their specific means. The gender-mainstreaming plan may be guided by the principle of equality or equity.

7. Grievance Mechanism

A grievance mechanism will be established and published so that all stakeholders are aware of its existence. The project coordinator/manager will be responsible for documenting all grievances and ensuring they are addressed in a timely manner.

8. Activities, Training and Engagement Plans

All training programmes and engagement plans will use a participatory approach that is rights based and integrates the perspectives of all users using bottom-up approaches, integrating the different views of local stakeholders and beneficiaries with those of institutions, authorities and decision makers. It will also be gender responsive.

9. Decentralized Monitoring and Evaluations

Project M&E will be done through decentralized assessments including meetings with the local committees, interviews of direct beneficiaries and their representative organizations, local and national workshops with local and national stakeholders, meetings with special groups such as women and indigenous peoples to verify indicators. The Annual Work Plan and outputs will be the main tool used for monitoring and tracking indicators, with stakeholder participation monitored in-progress evaluations. Progress towards achieving the objectives will be evaluated in terms of the quality and timeliness of products, using appropriate participatory methods, which ensure the timely and appropriate adjustment of the project implementation strategy.

Stakeholder's Participation Plan

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
Government	**Ministry of Agriculture, Rural Transformation, Forestry, Fisheries and Industry** (MARFFIL)	**Ministry of Agriculture, Rural Transformation, Forestry, Fisheries and Industry** (MARFFIL) is the main implementing agency and the chair of the Project Board. It will be a responsible party for project implementation including stakeholder engagement and project management through the PMU.	Implementation of the project through the establishment of the PMU. (Project Management). Participation in senior level advocacy meetings to encourage legislative processes (Outputs 1.2 and 1.3). Communication and coordination with the GEF and UNDP (Project Management). Technical knowledge and expertise to strengthening and supporting the themes of the project: biodiversity conservation, SLM, and gender and youth mainstreaming, etc. (all project components). Chair Project Board and provide guidance and management of the PMU to achieve the objectives and goals of the project. (all project components). Will promote the exchange of lessons learnt from other GEF projects implemented in SVG (Output 4.1). Ensure that the project is framed within the national policies and norms related to agricultural, environmental, and	Communication with the GEF and UNDP to guide the project actions. Implementation of the project and execution of all its aspects: planning, operational, technical, administrative, and gender focus activities. Achieve the project outcomes and outputs through effective stakeholder communication, engagement and coordination. Coordinate all of the gender activities of Gender Mainstreaming Plan.	1,2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			biodiversity conservation, and SLM (all project components). Ensure that the project complies with GEF safeguard policies, including considerations of gender, and national social policies through the participation of the Gender Division. (Output 4.3) Ensure broad-based stakeholder participation (all project components).		
Government	**Fisheries Division** MARFFIL	Fisheries Division is directly responsible for conservation and management of seashore stocks, habitats and marine protected areas, as well as coastal zones directly impacted by land-based activities; Participation in PSC meetings. Participation in senior level advocacy meetings to encourage legislative process. Participation in the selection of project beneficiaries.	Provide Information and data including maps to the centralized georeferenced Biodiversity and Land Use Database (Output 1.1.), demarcation and gazetting of Leeward Coast Marine Park (Output 2.2). Participate in training in, biodiversity conservation, marine monitoring and natural resources management (Outputs 1.2 1.5 and 2.2). Provide inputs, technical knowledge and information including data on the development and operationalization of financial mechanisms Protected Areas System and the legislative and policy framework and enabling environment (Output 1.4).	Guidance provided to the PMU on conservation management issues. Watershed management expertise and training developed. Stakeholders actively involved in all project activities.	1,2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			Participation in project activities related to sustainable financing (Outputs 1.4 and 2.2.). Contribute to education and awareness about conservation and management issues including the development of knowledge products. (Output 4.1 and 4.2). Providing inputs into and assistance with stakeholder management of fisherfolks for development of Leeward Conservation Zones (Output 2.2). Participation in senior level advocacy meetings to encourage legislative processes (Outputs 1.2 and 1.3).		
Government	**Forestry Department** MARFFIL	Forestry Department is directly responsible for conservation and management of forested landscape, national parks and protected areas, BD, IAS and ecosystems functions, including watersheds and water source.	Provide Information and data including GIS maps to the centralized georeferenced Biodiversity and Land Use Database (Output 1.1.) Participation in project activities related to sustainable financing (Outputs 1.4 and 2.2). Provide inputs, technical knowledge and information including data on the development and operationalization of financial mechanisms Protected Areas System and the legislative and	Project Board functioning and possesses diverse stakeholders. Forestry data and information incorporated into database monitoring system. Incorporation of environmental laws and regulations adhered to in project activities.	1,2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			policy framework and enabling environment (Output 1.4). Participation in the PSC assisting with overall guidance and management of the project. Provide inputs, guidance and leadership on the planning framework for INRM National Parks and Protected Areas System Plan and the achievement of Caribbean Challenge Initiative (CCI) targets (Output 1.3). Coordinate and provide co-leadership to the Forest Policy development, consultative process and advocacy of policy makers (output 1.2). Participate in training in SLM, biodiversity conservation, land use planning and natural resources management (Output 1.5). Assist and provide co-leadership to the demarcation, operationalization and gazetting of the Central Mountain Forest Reserve and Chatham Bay Wildlife Reserve including stakeholder management and data and maps (Output 2.1 and 2.3). Contribute to education and awareness about conservation	International conventions observed and mainstreamed.	

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			and management issues including the development of knowledge products. (Output 4.1 and 4.2).		
Government	**Agriculture Division Extension**	MARFFIL The Agriculture Division and Extension Services maintains direct relationships with farmers (crop and livestock) for the purpose of administering government support and for to sustainable agricultural technologies and practices.	Provide inputs and leadership to the development of training materials on biodiversity conservation, SLM, CSA and serve as a medium of information to framers and producers (Outputs 1.5, 3.2). Collect Monitor and implement soil conservation and freshwater quality (Output 1.1 and 3.2). Provide inputs and guidance on the development of knowledge products including lessons learnt and media products (Outputs 4.1 and 4.2).	Participatory training programmes and activities developed that reach all the relevant stakeholders. Training programs that are reflective of local needs and in local language and are culturally sensitive.	1,3,4
Government	**National Parks Rivers and Beaches Authority, Ministry of Tourism**	The National Parks Authority is an independent statutory body with a Board of Directors, attached to the Ministry of Tourism, and is responsible for the overall protected areas system management.	Provide Information and data including maps to the centralized georeferenced Biodiversity and Land Use Database (Output 1.1.), demarcation, gazetting and operationalization of the Leeward Coast Marine Park (2.1). Participate in the PSC assisting with overall guidance and management of the project. Provide inputs, guidance and leadership on the planning framework for INRM National Parks and Protected Areas System Plan and the	Project Board functioning and possesses diverse stakeholders. Incorporation of PA laws and regulations adhered to in project activities. Financial Mechanisms established Multi-stakeholder and gender balanced watershed management	1,2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			achievement of Caribbean Challenge Initiative (CCI) targets (Output 1.3). Provide inputs, technical knowledge and information including data on the development and operationalization of financial mechanisms, Protected Areas System and the legislative and policy framework and enabling environment (Output 1.4). Assist and provide co-leadership to the demarcation, operationalization and gazetting of the central Mountain reserve, Leeward Coast Marine Area and Chatham Bay including stakeholder management and data and maps (Output 2.1). Provide inputs and guidance on the development of knowledge products including lessons learnt and media products (Outputs 4.1 and 4.2).	committees established	
Government	**Physical Planning Unit, Ministry of Housing, Informal Human settlements, Lands & Surveys and Physical Planning**	The Physical Planning Unit is responsible for the implementation of the Town and Country Planning Act and its various regulations. The act seeks to ensure orderly and progressive physical development in St. Vincent and the Grenadines The	Provide Information including GIS maps to the centralized georeferenced Biodiversity and Land Use Database (Output 1.1.), demarcation and gazetting of Central Mountain Reserve (2.1) Participate in senior level advocacy meetings to	Biodiversity and Land Use Database incorporates physical planning data including land use maps	1,3

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		Unit is also responsible for EIAs.	encourage legislative processes (Outputs 1.2 and 1.3)		
Government	**Ministry of Health Wellness and the Environment**	Ministry of Health Wellness and the Environment, the executive arm of the Government of Saint Vincent and the Grenadines responsible for pursuing all official national health policies and environmental protection and management.	Contribute data and environmental information including GIS maps, to the centralized georeferenced Biodiversity and Land Use Database (Output 1.1.) Provide environmental data and stakeholder management in the Forest Policy incorporating PA policy, 1.4, training in integrated land use planning / resource management environmental management, land use planning certificate training, CSA and SLM techniques, biodiversity conservation and field assessment, marine management development and implementation and monitoring programmes (Output 1.5) Provide Multi-stakeholder management committees (Outputs 2.1, 2.2, 2.3 and 3.1). Participation in senior level advocacy meetings to encourage legislative processes (Outputs 1.2 and 1.3).	Project Board functioning and possesses diverse stakeholders. Environmental data and information incorporated into database monitoring system. Incorporation of environmental laws and regulations adhered to in project activities. International conventions observed and mainstreamed	1,2,3
Government	**Ministry of Finance, Economic Planning, Sustainable Development and Technology**	Ministry of Finance, Economic Planning, Sustainable Development and Technology is responsible for leading the process of re-engineering economic growth,	Implementation of the project through the establishment of the PMU. (Project Management) Communication and coordination with the GEF and UNDP (Project Management).	Implementation of the project and execution of all its aspects: planning, operational, technical, administrative, and	1,2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		promoting sustainable development and improving the quality of life of all Vincentians.	Technical knowledge and expertise to strengthening and supporting the themes of the project: biodiversity conservation, SLM, and gender and youth mainstreaming, etc. (all project components) Will promote the exchange of lessons learnt from other GEF projects implemented in SVG (Output 4.1). Ensure that the project is framed within the national policies and norms related to agricultural, environmental, and biodiversity conservation, and SLM (all output). Ensure that the project complies with GEF safeguard policies, including considerations of gender, and national social policies through the participation of the Gender Division (Output 4.3) Ensure broad-based stakeholder participation (all project components).	gender focus activities. Achieve the project outcomes and outputs through effective stakeholder communication, engagement and coordination.	
Government	**The Ministry of National Mobilization, Social Development, Local Government, Gender Affairs, Family Affairs, Persons with Disabilities and Non-Governmental Organizations**	The Ministry of National Mobilization, Social Development, Local Government, Gender Affairs, Family Affairs, Persons with Disabilities and Non-Governmental Organizations mission is to engage in social transformation through	Provide feedback on GOSVG social safeguards, grievance mechanisms, gender mainstreaming and participation of vulnerable groups. Participation in senior level advocacy meetings to encourage legislative process.	Project social safeguards are implemented inclusive of gender and youth mainstreaming, the establishment of grievance mechanism.	1, 2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		social empowerment, social protection and justice, using national mobilization, social development and Youth.	Provide leadership and guidance on the selection of gender focal persons and the gender focus activities of the projects including the monitoring and evaluation.		
Government	**Department of Gender Affairs**	The Department of Gender Affairs' mission is ensuring that all citizens of Saint Vincent and the Grenadines have equal access to opportunities that will shape their social, cultural, spiritual, educational, economic and political development.	Provide feedback on GOSVG social safeguards, grievance mechanism, and gender mainstreaming plan and gender focus activities (all outputs) Ensure gender balance and equity in monitoring and evaluation activities (Output 4.3) Participation in senior level advocacy meetings to encourage legislative processes and framework.	Project social safeguards are implemented inclusive of gender and youth mainstreaming, the establishment of grievance mechanism.	1,2,3,4
NGO	**Windward Islands Farmers Association (WINFA)**	Windwards Island Farmers Association aims to be a robust financially independent democratic organization championing the cause of farmers and rural communities in the Caribbean through the provision of programmes which address food security, gender equity, continuity and linkages.	Provide technical expertise and lessons learnt in CSA and SLM training activities of the project (Outputs 3.1 and 3.2). Provide assistance to, including mentorship of selected alternative livelihoods businesses.	Livelihoods and businesses established and are socially inclusive. Wide cross-section of farmers participating in project activities. Training and mentorship are reflective of local needs and varied stakeholders	3,4
NGO	**CALFICO-**	A local fisherfolk NGO based on Windward side of the island of St Vincent.	Provide stakeholder management of fisherfolk	Project activities and governance is multi-stakeholder,	2,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			stakeholders in the Leeward Coast Marine Area (Output 2.2).	participatory, and reflective of civil society perspectives.	
NGO	**Sustainable Grenadines**	Sustainable Grenadines (SusGren) Inc. is an integrated development and biodiversity conservation NGO operating in the Grenadines Islands.	Participation in and contribution to the overall management of the project via the PSC. Stakeholder management and guidance in the Chatam Bay demarcation, legalization and operationalization. Participation in the monitoring and evaluation activities of the project providing the necessary feedback (Output 4.3).	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives.	3.4
NGO	**Richmond Vale Academy**		Provide technical inputs and guidance on the Demonstration plots and field schools on SLM and CSA (Output 3.2). Provide inputs into the development of knowledge products including lessons learnt and media products (Outputs 4.1 and 4.2). Participation in the monitoring and evaluation activities of the project providing the necessary feedback (Output 4.3).	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives. Training and mentorship are reflective of local needs and varied stakeholders Knowledge products developed and are reflective of all social groups	3.4
NGO	**Buccament Development Organisation**	Buccament Development Organizations. A network of Community Based Organization for the Buccament Area whose	Provide watershed management guidance and stakeholder management support for the Buccament Watershed and Project ridge to reef site (Output 2.2).	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives.	3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		common purpose is the social and physical development of the area.	Provide stakeholder management in the Leeward Coast Marine Area (Output 2.2). Provide inputs into the development of knowledge products including lessons learnt and media products (Outputs 4.1 and 4.2). Participation in the monitoring and evaluation activities of the project providing the necessary feedback (Output 4.3).	Knowledge products developed and are reflective of all social groups	
NGO	**Union Island Environmental Attackers**	A Union Island based NGO whose mission is to create a beautiful and attractive environment through the use of dedicated and empowered members, along with local and international support and community involvement.	Participation in project activities related to sustainable financing (Outputs 1.4). Provide inputs into Output 2.3, to provide on-site management of the proposed Chatham Bay Wildlife Reserve, in co-management arrangements with the Forestry Services, though hiring of staff and through the use of dedicated and empowered members, along with local and international support and community involvement. Implement necessary activities as a potential sub-grantee in activities related Output 2.3. Provide inputs into the development of knowledge products including lessons	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives. Training and mentorship are reflective of local needs and varied stakeholders Knowledge products developed and are reflective of all social groups	3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
			learnt and media products (Outputs 4.1 and 4.2). Participation in the monitoring and evaluation activities of the project, providing the necessary feedback (Output 4.3).		
Government/Statutory	**Central Water Service Authority (CWSA)**	The Central Water and Sewerage Authority (CWSA) is St. Vincent and the Grenadines' only provider of pipe borne water and sewerage services. Additionally, the CWSA is responsible for solid waste management services throughout the country as well as freshwater quality testing above water intakes.	Participate in senior level advocacy meetings to encourage legislative processes (Outputs 1.2 and 1.3). Provide information and guidance in the Improved SLM practices in 3 upper watershed landscapes in and surrounding the Central Mountain Forest Reserve including water quality testing in the watersheds (Output 3.1). Provide technical advisory role and data related to water quality, including water collection and water quality testing both above and below the water intakes, supporting the ridge to reef watershed data gathering and monitoring process (Output 3.1).	Information management database and monitoring system established and operationalized within a land use planning process with data reflective of water use management and supply of non-treated water**.**	1 , 3
NGO	**National Council of Women SVG**	An umbrella organization that has members that are a network of women's organizations in the country. Presently implementing some backyard gardening project. Provides gender perspective of rural women and women organizations on	Stakeholder management ensuring gender equity and the full participation of women and concerns of women (all outputs). Provide feedback on GOSVG social safeguards, grievance mechanism, and gender mainstreaming plan and gender focus activities (all outputs).	Gender mainstreaming in project governance, activities, and beneficiaries.	1,2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		biodiversity conservation and sustainable land management.	Ensure gender balance and equity in monitoring and evaluation activities (Output 4.3)		
NGO	**Network of Rural Women Producers**	An organization of women engaged in agriculture and agro-processing and dedicated to sustainable rural development and gender empowerment and equality in the agricultural sector. A member of the Caribbean Network of Rural Women Producers.	Stakeholder management ensuring gender equity and the full participation of women and concerns of women in Alternative livelihood and small businesses supported (Output 3.4).	Project activities and governance is multi-stakeholder, gender responsive, participatory, and reflective of civil society perspectives.	3,4
NGO	**CYEN**	Local arm of the regional non-profit, civil society, charitable body that focuses its resources on empowering young people and their communities to develop programmes/actions to address socio-economic and environmental issues.	Provide inputs into the implementation of the gender action plan and gender focus activities. Ensure gender balance and equity in monitoring and evaluation activities (Output 4.3) Participation in senior level advocacy meetings to encourage legislative processes and frameworks.	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives.	1,2,3,4
		SCIENCE is a NGO with one of its main objectives to deepen understanding and appreciation of the natural environment of St. Vincent and the Grenadines. It works heavily among youths and school-aged children.	Providing inputs and assistance with stakeholder management (all outputs). Provide inputs into the development of knowledge products including lessons learnt and media products (Outputs 4.1 and 4.2).	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives.	3,4
INGO	**TNC**	The Nature Conservancy is a charitable environmental	Provide technical assistance and knowledge about SLM,	Collaboration in some project	2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		organization, headquartered in Arlington, Virginia, United States. Its mission is to "conserve the lands and waters on which all life depends." The Nature Conservancy is a charitable environmental organization, headquartered in Arlington, Virginia, United States. Its mission is to "conserve the lands and waters on which all life depends."	watershed management, biodiversity conservation and CSA.	activities related to CSA, SLM, and biodiversity conservation. (Project components 1, 2, and 3)	
International Development	FAO	The Food and Agriculture Organization of the United Nations is a specialized agency of the United Nations that leads international efforts to defeat hunger through agriculture livelihoods.	Provide technical assistance and knowledge about SLM, watershed management, biodiversity conservation and CSA. Lessons learnt and other knowledge products.	Collaboration in some project activities related to CSA, SLM, and biodiversity conservation. (Project components 1, 2, and 3).	2,3,4
International Development	**IICA** The specialized agency of the Inter-American System for agriculture, IICA supports the efforts of Member States to achieve agricultural development and rural well-being. IICA SVG office works for the development of agriculture and rural development.		Provide technical assistance and knowledge about SLM, watershed management, biodiversity conservation and CSA. Lessons learnt and other knowledge products.	Collaboration in some project activities related to CSA, SLM, and biodiversity conservation. (Project components 1, 2, and 3).	2,3,4
INGO	**Fauna and Flora International**	Fauna & Flora International, formerly the	Provide technical assistance and knowledge about SLM,	Collaboration in some project	2,3,4

Stakeholder Type	Stakeholder	Role in the Project	Actions	Results	Component
		Fauna and Flora Preservation Society, is an international conservation charity and non-governmental organization.	watershed management, biodiversity conservation and CSA. Lessons learnt and other knowledge products.	activities related to CSA, SLM, and biodiversity conservation. (Project components 1, 2, and 3)	
Academic	**University of the West Indies**	The regional higher education institution responsible for education in the 18 territories in research and academic development.	Provide technical assistance and knowledge about SLM, watershed management, biodiversity conservation and CSA. Lessons learnt and other knowledge products.	Collaboration in some project activities related to CSA, SLM, and biodiversity conservation. (Project components 1, 2, and 3)	2,3,4
Academic/Training	**SVG Technical College**	The St. Vincent and the Grenadines Community College fosters the holistic development of learners through the provision of tertiary education that enables them to contribute proactively to a changing society, function effectively in the workplace and pursue further studies.	Provide technical and scientific inputs into specific project activities (Output 3.2). Provide input into training activities including the development of manuals (Output 3.2). Provide input into the development of knowledge and media products (Outputs 4.1 and 4.2).	Project activities and governance is multi-stakeholder, participatory, and reflective of civil society perspectives. Training and mentorship are reflective of local needs and varied stakeholders. Knowledge products developed and are reflective of all social groups.	

Timeline of Stakeholder Engagement

Stakeholder	Year 1				Year 2				Year 3				Year 4				Year 5	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Ministry of Agriculture, Forest	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ministry of Finance, Economic Planning, Sustainable Development and Technology	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Stakeholder	Year 1				Year 2				Year 3				Year 4				Year 5	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Department of Forestry	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Department of Fisheries	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Agriculture Division Extension			X	X	X	X	X	X										
CWSA	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ministry of Health Wellness and the Environment	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
National Parks Rivers and Beaches Authority, Ministry of Tourism	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Physical Planning Unit, Ministry of Housing, Informal Human settlements, Lands & Surveys and Physical Planning	X	X	X	X														
The Ministry of National Mobilization, Social Development, Local Government, Gender Affairs, Family Affairs, Persons with Disabilities and Non-Governmental Organizations	X				X					X								
Department of Gender Affairs	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
National Council of Women			X	X	X	X	X	X	X	X	X	X						
Windward Islands Farmers Association (WINFA)			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SVG Chamber of Industry and Commerce																		
Sustainable Grenadines	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Richmond Vale Academy			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Buccament Development Organization					X	X	X	X	X	X	X	X						
Network of Rural Women Producers SVG																		
Caribbean Youth Environment Network SVG					X	X	X	X	X	X	X	X						
Union Island Environmental Attackers					X	X	X	X	X	X	X	X	X	X	X	X	X	X
The Nature Conservancy	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FAO			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IICA																		
Flora and Fauna International	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
University of the West Indies	x	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SVG Technical college			X	X	X	X	X	X										

ANNEX G. GENDER ANALYSIS AND ACTION PLAN

As in other Eastern Caribbean countries; the situation, condition, and position of women in St. Vincent and the Grenadines is determined by social, political, and economic relationships and cultural models that reproduce structural inequalities. Gender relations in SVG are heavily influenced by tradition and socialization, with women and girls facing discrimination in many areas while men and boys have privileges that influence their life chances at all levels[107]. There is data to show that there is unequal distribution of economic resources and women's access to them, as well as other inequalities women face. Women's participation in all aspects of their lives are affected; including women who are often among the most income poor, have limited access to ownership and control of material and productive resources, limited to gender based occupational segregation; with women in the lower income earning occupations, limited access to credits and loans, lack of a gender responsive approaches to evidence-based policy development and limited involvement in leadership and decision making.

Gender and Poverty

According to the National 2012 Census, St. Vincent and the Grenadines has a total population of 109,188 persons with 51 percent (55,551) being males and 49 percent (53,637) females. SVG has a high human development ranking[108] based on estimated life expectancy of 71.0 years for males and 75.2 years for females; expected years of schooling of 13.1 years and 13.5 years for males and females, respectively; and estimated gross national income per capita (2011 PPP $) of 7,600 and 13,095 for females and males, respectively (Human Development Report 2016 Team).

St. Vincent and the Grenadines has an undeveloped economy, based upon a very limited range of activities; agriculture, tourism, manufacturing, offshore finance and call centers; with a significant degree of export market concentration[109]. However, SVG traditionally depended on bananas as a major foreign exchange earner, which was sold to the EU under its preferential arrangements[110]. In 1995, banana generated 23.3% of export earnings, employing 68.1% males and 31.9% females; but the loss of preferential markets in 2007, natural disasters and disease resulted in the crop only being able to generate 4.2% of exports in 2010.

Noting that biodiversity within St. Vincent and the Grenadines (SVG) is under threat from a variety of sources, including expanding and unsustainable agricultural practices, invasive species encroaching into native forests, tourism development, harvesting, pollution from solid wastes/sewage and oil spills, sustainable land use management and biodiversity conservation have to be mainstreamed into national land use planning, sector policies, and legal frameworks. Further, climate smart agricultural practices should be an integral part of sustainable land use management to ensure long term sustainability of agricultural production at the community and producer level, supported through a set of nationally managed financial, technical and information services.

Female-headed households constitute a significant percentage of the poorer households in SVG. According to the last Country Poverty Assessment (2008) there was a high correlation between female-headedness and poorer households. In one of the recognized poorest villages in the country, New Sandy Bay, a recorded 95.8 percent of the households were headed by females. Women's participation in all sectors is less than men with higher numbers of females in the lowest income segment indicating a gendered segmentation in economic participation (CPA, 2008). Female unemployment is also high in the rural areas (where poverty is higher than in urban areas) where their

[107] Linnette Vassell, Rawwida Baksh and Associates. 2015. *Country Gender Assessment St. Vincent and the Grenadines.* Retrieved March 19, 2018, from http://www.caribank.org/wp-content/uploads/2016/05/CountryGenderAssessmentStVincentandtheGrenadines.pdf

[108] United Nations Development Programme. 2017. Human Development Report retrieved May17th, from http://hdr.undp.org/en/countries

[109] The Commonwealth. 2018. *The Commonwealth*. Retrieved March 5, 2018, from St Vincent and the Grenadines: http://thecommonwealth.org/our-member- Tcountries/St-Vincent-and-Grenadines

[110] Ibid.

involvement in the agricultural chain is sometimes limited to assisting male partners and in the nascent agro-processing segment.

Gender and Agriculture

There are also important gender considerations for these agricultural and livelihood interventions; since women traditionally make up a significant portion of the local agricultural sector including post production activities. There are constraints to their levels of involvement, and access to support is traditionally more available to men, such as extension services. There are also lower levels of female participation in positions of leadership in agriculture in general, but higher levels of involvement and leadership in the value chain (such as processing and marketing).

In SVG, agriculture comprises a large informal sub-sector estimated at 5,000 persons, and while the majority are women, they face barriers to equal access to resources and income. The Ministry of Agriculture acknowledges that banana replanting projects for example, should be made more accessible to women and notes in particular, the Banana Accompanying Measures (BAM) initiative, which has stated that it strives for gender equity "to empower women to meaningfully participate at all levels of the value chain". Further to this, data for 2012 indicates that women are still lagging in terms of access to the formal banana rehabilitation programme, as of the 490 farm operators involved in banana replanting projects, 300 (63%) were males and 174 (37%) were females.[111] However, agricultural cooperatives established for the advancement of agro-processing, have a greater number of women involved.

Within the agricultural industry, women also face challenges such as securing stable farm labour for their farms due to a lack of interest in farming by the young, especially males[112], and jealousy from other women who may not want their husband to work a farm owned by a woman; lower wages paid to women (than men) on private farms; lack of males within the household to aid with child care and maintenance of the farm; and more limited options for rural women (than men) to secure a livelihood since it is customary on private farms for women to earn less than men (EC$40-45 per day, for men compared to EC$30-40 for women). Data originating from the Farmers' Support Programme in 2014 showed that a lesser number of females compared to men (30.6% compared to 69.4%) were able to obtain a loan. Moreover, the average approved loan for females was EC $4,356.93 and EC $5,979.69 for males – EC $1,600 more than females[113]. The data did not indicate the female/male ratio that applied for the loan; nor did it provide information on the breakdown of the requested loan. Hence, a full analysis cannot be made to determine exactly why women were approved for less loans than men.

Gender Economics and Ownership of Resources

Based on data from the 2010 Enterprise Survey, St. Vincent and the Grenadines outperforms all the other comparator countries in relation to female participation in ownership of businesses (76% of all firms), the proportion of permanent full-time workers who are women (49%) and the proportion of businesses that have females in top management positions (39%). However, women constitute the majority of the estimated 30% of the country's population living below the poverty line and 55% of workers in informal-type sectors. The figures from the Enterprise survey failed to reveal the clear segmentation that exists in the labour market, with female employment concentrated mainly in community, social and personal services; finance and business services; and wholesale and retail trade (and mostly in elementary positions)[114].

Similar to crop cultivation, the majority of the segments of the fishing value chain is over-represented with males, with women providing largely administrative and marketing supporting services. The over-representation of males results in an expected high male ownership of fishing production resources and assets compared to females. Men

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111 "Agric Info" *in* The Quarterly Agricultural News Letter of St. Vincent and the Grenadines, Ministry of Agriculture, Rural Transformation, Forestry, Fisheries and Industry. Kingstown, St. Vincent and the Grenadines. 2012, vol. 1, p.27.

92 Ibid.

113 Vassell, L. 2015. Country Gender Assessment St. Vincent and the Grenadines. Rawwida Baksh and Associates. Retrieved March 19, 2018, from http://www.caribank.org/wp-content/uploads/2016/05/CountryGenderAssessmentStVincentandtheGrenadines.pdf

114 Ibid.

own boats, fishing gear and fisher technologies such as radios and GPS. These assets are considered the men's assets, though in a few rare cases it may be considered as family assets. The economic activity is approached as an activity that the male takes part in, and that the family unit benefits from. Nevertheless, in general, financial decisions tend to be made jointly, suggesting that men and women divide the financial costs of the home either equally, or by ability to pay[115] . Decision making of the fishing value chain, particularly fishing, is done mainly through cooperatives and fisherfolk organizations which have majority males both in the general membership and in the executive.

On the other hand, women seldom have ownership of fishing related assets, as they are minimally involved in the production process at any stage. However, in a CMBP (2016) survey women in the Grenadines islands of Union Island and Mayreau express no interest in obtaining fishing related assets or in the other production segment of the fishing value chain. Women in those islands did possess other assets related to economic activities that they are more involved in, for example, small cook shops (which served fish dishes obtained from fisherfolks), market stalls with the associated tools of trade and merchandising and/or other micro-enterprise (Vassel et al, 2015). In the fishing communities, men and women may have shared assets of house, land and other properties. These are usually considered family assets. Men and women in the fishing industry, even as married couples seldom have joint bank accounts. Decision making in the home seem to be done jointly via consensus. Moreover, research both from within the Caribbean region and elsewhere indicates that small and micro-enterprises perform better when women are involved and leading same[116]. Women often identify these businesses as being "family owned". Also, family-owned enterprises tend to have better performance overall[117]. The project recognizes this gender segmentation of decision making and ownership of assets and will consider it in the selection of participants in both its training programs and an in its incentivization programs with the objective of achieving the maximum benefits from the project for the household.

In the agriculture sector, male ownership of lands is higher, and a higher percentage of males are involved in crop production traditionally. There is also joint ownership of agriculture land and assets and agriculture, unlike fishing, is often approached as a family livelihood. There are also significant amounts of land referred to as family land [118]. Family land is used by the entire family in loose arrangements. The family unit in the family land is the extended family, which can extend to several generations. Family land is considered a mechanism of social welfare by sociologists and an obstacle to agricultural development by economists and planners[119]. Women often have access to agricultural lands through family lands.

Gendered Occupational Segregation

According to the 2015 Labour Force Survey for St. Vincent and the Grenadines[120], males comprised 55.0 percent (31,118) and females 45.0 percent (25,486) of the labour force. The employed labour force comprised 58.1 percent (24,654) of males and 41.9 percent (17,755) of females, and the unemployment rate was 30.3 percent females and 20.8 percent males. However, the unemployment rate was in the reverse situation in 2001 (according to the 2001 Census) – 22.4 percent of males were unemployed, compared to 18.3 percent unemployed females. The data also revealed that the employment rate for males is consistently higher than females for all the age groups.

According to the Caribbean Development Bank, Country Gender Assessment St Vincent and the Grenadines, analysis of the gendered occupational segregation revealed that there are more males than females in keeping with traditional gender roles in construction (4,433 males compared to 317 females); agriculture, forestry and fishing (3,903 males compared to 905 females); and transportation and storage (2,571 males compared to 571 females). However, women are over-represented in education (2,328 females compared to 840 males); household activities

[115] Ramessar, C. R. 2017. Rapid Socio-economic Assessment of the Grenadines, Caribbean Marine Biodiversity Project Report
[116] K'nife, K. 2016. Director Office of Social Entrepreneurship, University of the West Indies, Jamaica, Personal Interview.
[117] Ibid
[118] Toppin-Allahar. 2013. Land Law and Agricultural Production in the Eastern Caribbean: A Regional Overview of Issues and Options, FAO
[119] Ibid
[120] Labour Market Statistics. 2015. *Youth Unemployment in the Caribbean.* Retrieved from http://documents.worldbank.org/curated/en/756431468012643544/pdf/883620WP0Box385224B00PUBLIC00April02014.pdf

as employers (1,494 females compared to 470 males) and public administration and defense (2,125 females compared to 1,851 males).

The 2010, World Bank Enterprises, study of 154 firms in SVG revealed that women are active in the business environment, but they tend to manage smaller firms – 52.3 percent of workers in small firms, 37.7 percent in medium-sized firms, and 20.2 percent in large firms[121]. For management positions, 39 percent of females were in top management positions; and 32.3 percent were female managers. Moreover, 63 percent of male run businesses had contracted loans and lines of credit, compared to 46 percent of female run businesses; while 72 percent of loans to male run businesses were accessed with collateral, compared to 54.4 percent of female run business; and 11.1 percent of total sales of male run businesses were exported compared to 2.4 percent of total sales of female run businesses. It was further noted that 21.9 percent of male run businesses directly exported at least 1% of their sales, compared to 8.4 percent of female run businesses; and 27 percent of male run businesses receive quality certification, compared to 11 percent female run businesses. The 2010 World Bank Enterprises study also shows that females are concentrated mainly in the services sector, while males are in manufacturing and export-oriented enterprises.

There is a scarcity of data and research on value chains for the various agricultural commodities and the use of natural resources and ecosystem services especially at the village levels. Female-headed households engaged in farming devoted their land equally to local and export crops despite more resource constraints including access to land and limited availability of labour, one study indicated[122]. There are more women than men in the nascent agro-processing sector which presently utilizes traditional techniques of preservation and manufacturing. The project in its focus on SLM and CSA identifies sustainable livelihoods as a tool for addressing the issues of land degradation and biodiversity conservation. The development of the nascent agro-processing segment of the agricultural value chain is one of the activities identified. The incentivization of the agro-processing segment will achieve both the environmental objectives of the project and contribute towards women empowerment and gender balance in the agriculture sector. There is a need for gender analysis of the major commodities value chains in SVG. This gender analysis along with a market analysis will allow for identification of women and men roles in the value chain and ensure they are able to access to any new or emerging markets.

Access to Credits and Loans

Female entrepreneurs and business owners including those in the agricultural sector face the barrier of limited access to credit. Lending/borrowing patterns through the National Development Foundation (NDF) mirrors the gender segregation of the labour market[123]. The NDF loans range from retail trades to agro-processing; agriculture and fishing; skilled trades; small manufacturing and construction; and the service sector. The loans are predominantly short-term, at 9% interest. Majority of males borrow for trades, manufacturing and construction, and agriculture and fishing; while females borrow for agro-processing, and the service sector.

In 2011, there was an 18 percent decrease in the demand for loans from women compared to 2010, and a 39 percent decrease in the value of loans granted to them. On the other hand, there was a 9 percent increase in the number of loans allocated to males in 2011 compared to 2010, and a 14 percent decrease in the value.

Moreover, the average loan size to women fell from EC $16,722 in 2010 to EC $12,395 in 2011 (a 25.9% decrease), compared to EC $19,689 in 2010 to EC $15,546 in 2011 (a 21.0% decrease) for men. Whilst the data does indicate women's participation in credit scheme is less than their male counter-parts further analysis is needed to identify the specific factors that affect women's declining participation.

The project recognizes this disparity and will ensure that women participate equally in all incentivization activities including the recipients of grants and other financial business support mechanisms. This will be achieved by the design and development of criteria for selection of grantees that are socially and economically inclusive. In addition,

[121] World Bank (2010). *Enterprise Survey of Business Managers: St. Vincent and the Grenadines*. Retrieved March 20, 2018 at: http://www.enterprisesurvey.org/data/exploreeconomies/2010/st-vincent-and-the-grenadines

[122] Grossman, Larry (2000), Women and export agriculture: the case of banana production on St. Vincent in the eastern Caribbean. Book chapter : Women farmers and commercial ventures: increasing food security in developing countries 2000 pp.295-316 ref.33

[123] Vassell 2015

a gender analysis of the value chain and market analysis will be done to identify men and women's participation in the sector and their equal access to emerging and new markets. The focus on the agro-processing segment of the agriculture sector for incentivization will ensure women who at present are under-represented in the agricultural sector are recipient of grants and incentives as well as specialized training, as they are highly visible in the agro-processing sector.

Lack of Gender Responsive approach in Plans and Programs

The St. Vincent and the Grenadines Constitution under Articles 1 and 13, states that women are entitled to "fundamental rights and freedoms," including freedom from discrimination based on gender.

Over the years, the Government of St. Vincent and the Grenadines has formulated national policies, plans, strategies and programmes that resulted in the alleviation of some of the challenges that women encountered in their participation in the society. Among these was the development of a social safety net policy, and a Basic Needs Fund [124]. In addition, The Government signed international treaties and conventions for the protection and empowerment of women. Such treaties and conventions include the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), acceded to in 1981; the Convention on the Rights of the Child (CRC), ratified in 1993; and the Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women (or Convention Belém Do Pará), ratified in 1996.

In its efforts to address gender inequalities, the Government of St Vincent and the Grenadines acted by establishing a Gender Affairs Agency, and implemented a number of initiatives to generate employment that will directly benefit women in rural communities. In addition, in 2009, it adopted a gender-equality policy and a related operational strategy. The government is also seeking to ensure that policies, programmes (including private-sector development) and practices are gender responsive. The changing of the name of the Department of Women's Affairs (DWA) to the Gender Affairs Division (GAD) was an effort to reflect a focus "on establishing equality between women and men, proposing socially responsive legislation and implementing policies that favorably affected women."

Additionally, a number of key laws and orders have been revised to address the employment-related concerns of women and children. Equal Pay Act (No. 3) of 1994 sets out equal remuneration for all workers including industrial and agricultural workers and allows for maternity leave to be granted to women. The Employment of Women, Young Persons and Children Act (No.53) of 1992 addresses the employment of women, young persons and children in industrial work and on ships. And the Wages Regulations Orders (2003) establishes minimum wages and maternity benefits for particular categories of workers (domestic workers, hotel workers and shop assistants), most of whom are women.

The country's National Economic and Social Development Plan (NESDP) 2013–2025 focuses on its economic development, social development, governance, physical infrastructure and the environment. However, gender was not directly addressed in the document, with the only gender equality objective being to "increase the number of males who attain higher education". Despite identifying poverty eradication/reduction as a central outcome of the NESPD, and the fact that women were identified as the most economically vulnerable group, there was no mention of women or provisions to address gender or women inequality issues.

Contributions will be made to gender responsive policies and plans and programs in the natural resources and environmental sector from the project activities. The project will complete several gender responsive socio-economic analyses which will result in gender data that will include data on sexes, community, income levels including household incomes, land tenure, use of natural resources disaggregated by sex, identification of legal and structural barriers to men and women participation in CSA and SLM activities. This information will be incorporated into an integrated natural resource management system that will be used for evidenced policy gender responsive

[124] Vassell 2015

policies formulation. Along with policy analysis of the regulatory framework of INRM, the sector will benefit from the development of gender responsive natural resources policy.

Governance and Leadership

In 2015, SVG was ranked 136 by the Inter-Parliamentary Union with 13 percent females, or 3 out of the 23-member parliament, the highest decision-making body in the country. This is more than 50 percent below the recognized and strived for 30 percent of most governments in the Caribbean region as part of their commitments to the gender mainstreaming goal of decision making in both the private and public sector of Commonwealth countries[125]. (Vassel et al, 2015). There is no female minister of government and the country's Gender Development Index (GDI) composite score was not available in the HDI report because of the unavailability of some data.

Women's representation on public sector boards appointed by Government has increased 226% over the last 20 years (from 27 to 88). Females held 28 percent of seats (197) in 2014; an increase from 18.7 percent (46) in 1994 – a 9.3 percent percentage point increase over the 20 years. Males on the other hand, held 72 percent of seats (505) in 2014; a reduction of 9.3 percent percentage points since 1994. The 2015 Country Gender Assessment attributed the absence of initiatives on gender and leadership, low organizational capacity and advocacy by the National Women's Council among the factors that prolonged the low participation of women in leadership and decision-making[126].

Women are members of churches, Non-Governmental Organizations including agricultural and fishing cooperatives, environmental NGOs, Lions Clubs and other service organizations. There are also local women offices of the two major political parties in the island. The National Council for Women is a national umbrella NGO that focuses on women's social issues mainly domestic violence and whose membership consist of other NGOs. Women are active in both political parties as general members and at the executive levels. In the agriculture and natural resources sector there are several women producer's organizations and women agro-processing organization including the Network of Rural Women Producers. Research in Union Island and Mayreau suggests that women's participation in civil society seems to be motivated by wanting to improve their communities as well as the quality of life for their families. This is especially so in the case of the Non-Governmental Organizations. Their participation in churches and sports was motivated by the need for spiritual and social interactions outside of the home. The churches also conduct welfare activities and general training.

Women's leadership and empowerment will be enhanced by the project. The project will ensure the participation of women in all activities through the project design which is gender responsive, human rights based, and has social and environmental safeguards. Committees established both at the project management level and at the activities level including watershed level committees and local project committees will have women participation in the leadership and membership through membership criteria selection and the TOR.

Gender Based Violence

In the 2007/08 Country Poverty Assessment, it was reported that crime was one of the two areas (the other being social relationships) which had seen the "most dramatic and negative changes"[127]. In the 2014 Country Gender Assessment, crime was still a big concern for community members; along with domestic violence and the abuse of children.

Like the rest of the Caribbean, gender-based violence (GBV) is of concern in SVG. Among conventional crimes, violence against women affects a significant number of women and girls in SVG and manifests itself in intimate

[125] Vassell 2015

[126] Ibid.

[127] Kairi Consultants Limited. 2008. *St Vincent and the Grenadines Country Poverty Assessment 2007/2008.* Kingstown: Ministry of Finance and Planning Administrative Centre. Retrieved March 6, 2018, from http://www.stats.gov.vc/LinkClick.aspx?fileticket=gxP733Q3EZk%3D

relationships between adults, between adults and youths and, increasingly, among youths[128]. In comparison to other Eastern Caribbean states, SVG records the highest number of acts of violence against women, as revealed at the 2011 Caribbean Regional Colloquium of "Women Leaders as Agents of Change," held in Port-of-Spain, Trinidad and Tobago[129]. Additionally, rape data showed that SVG had 71 rapes per 100,000 persons, compared to 54 per 100,000 for Antigua and Barbuda (using only the sex disaggregated data from 2004–2010); 46 per 100,000 for St. Kitts and Nevis; 40 per 100,000 for St. Lucia; and 34 per 100,000 for Dominica. In addition, SVG holds the record of having the most incidents of female homicides among the group. Between 2000 and 2011, 45 female homicides were recorded and 17 of these were cases of domestic violence. The analysis of incidents of domestic violence shows that women are predominantly the victims/survivors (74% or 176 persons), while men are predominantly the perpetrators (95% or 217 persons) of domestic abuse [130]. Domestic violence affects women overall negatively including their participation in the formal economy and society but also affects children and other members of the household socially and psychologically[131].

Implications for Project Activities

Taking into account the reality of women's unequal position in society, this project titled Reducing Land Degradation using a Ridge to Reef Approach is being developed with gender equality analysis as a priority in addressing the following key objectives:

- Develop systemic and institutional capacity to support integrated landscape management
- Develop national capacity to provide financial, technical, and information services for climate smart agricultural production
- Operationalise resilient agricultural practices integrated with biodiversity conservation
- Manage knowledge for sustainable land management, climate smart agriculture and biodiversity conservation
- Increase investment in integrated landscape management practices with biodiversity mainstreamed.

Recognising the differential impacts of project-based interventions on men and women, the project will ensure a balanced outreach and involvement of both women, men, and youth in capacity support actions involving extension services, such as demonstration plots and field schools on sustainable land management (SLM) and climate smart agriculture (CSA). Small business support for value chains will be tied to farming and production practices using climate resilient crops and methods and will support women-led initiatives. Gender equality and social issues will be fully considered in these projects: both men and women will be incorporated into project implementation activities ensuring gender equality and gender accountability is mainstreamed at both the project level and component level that will be tracked as part of the M&E system. Special attention will be paid to gender equality issues in developing socioeconomic indicators, and in the capacity-building activities.

As this gender analysis is based on a desk review and was limited by the need for data at the parish, village, watershed or community levels, to achieve the above further data collection will be undertaken at local levels. This will include the designing and implementation of gender responsive data collection tools for community based socio-economic data collection.

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[128] Allen, S. (2011). Youth on the Bloc Survey in St. Vincent and the Grenadines. Kingstown: Accessed at: http://caribbean.unfpa.org/webdav/site/caribbean/shared/publications/2011/Barbados/Gender/Youth%20on%20the%20Bloc%20Survey%20in%20St%20Vincent%20the%20Grenadines.doc

[129] Chance, K. (2011). "St. Vincent has most female deaths, rapes cases in OECS". Caribbean News Now! Accessed at: http://www.caribbeannewsnow.com/topstory-St-Vincent-has-most-female-deaths,-rapes-cases-in-OECS7002.html

[130] Grossman, Larry (2000), Women and export agriculture: the case of banana production on St. Vincent in the eastern Caribbean. Book chapter : Women farmers and commercial ventures: increasing food security in developing countries 2000 pp.295-316 ref.33

[131] Kairi Consultants Limited. 2008.

Project gender mainstreaming plan

Project component	Project output	Gender focus in the project output	Activities necessary for incorporating the gender focus into the project output and the responsible parties	Indicator	Baseline	Goal
1.	Output 1.1 – Natural resources information management system harmonized through development and implementation of a centralized geo-referenced Biodiversity and Land Use Database	Natural Resources information management system possess gender responsive data including data disaggregated by sex, age, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem uses disaggregated	▪ Awareness and sensitization seminar on gender data and its importance for policy makers and local level stakeholders ▪ Design and development of gender responsive data collection tools ▪ Collation and systemization of gender responsive data sex disaggregated data on sex, age, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem uses, age, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem uses ,	% of data disaggregated by sex, age, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem uses; age, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem uses	0	100% of data is gender responsive disaggregated by sex age, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem usages, diversity of women and men, community, income levels, social status, cultural factors, land tenure, natural resources and ecosystem uses
	Output 1.2 - Strengthened policy, legal and regulatory framework for INRM (ridge to reef) Output Caribbean Challenge Initiative (CCI) targets.	The policy reformations and new policies that provide the regulatory framework for INRM will include provisions for women's access and full participation in INRM –	▪ Gender awareness and gender mainstreaming seminar for policy makers and local level stakeholders including NGOS to sensitize and raise awareness of the need for gender responsive policies in general and in INRM ▪ Gender gap analysis of the polices and legislations with the aim of addressing barriers that prevent women's access to resources and participation.	% of gender responsive policies	TBD	100% of policies and legislations are gender responsive
				Level of women's empowerment[132] to influence the outcomes of the policy reform	Level of empowerment: 0	Level of empowerment 4:

[132] Level of empowerment scale: 0=is not familiar with the processes of policy reform, 1= is somewhat familiar with the processes of policy reform, 2= knows the processes of policy reform, 3= puts knowledge of the processes into practice, 4= contributes to the processes of and influences the outcomes of policy reform. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at beginning and end of the intervention with the

			▪ Design of inclusive and participatory consultative process to support access of women and especially rural women to policy reform processes. ▪ Reformed and new policies address barriers to women's access to resources and participation.	% of women and men participants in consultations	Consultations not started	50 % of participants in each consultation are women
	Output 1.3 - Strengthened coordination and planning framework for INRM, SLM, BD, PA.	The strengthened and revised planning framework for INRM and National Parks and Protected Areas System includes a gender responsive gender planning framework	▪ Develop data collection tools and methodologies for the collection of relevant socio-economic data including but not limited to sex, age, community, income and livelihood, disaggregated data to inform the planning framework for INRM, SLM, ICZM and BD in target sites. ▪ Implement gender responsive data collection tools ▪ Systemization of the sex disaggregated and gender responsive data, development of relevant indicators and incorporation in the Centralized Information Management System. ▪ Use sex disaggregated data to inform policies and plans.	% of policies and plans informed by sex disaggregated data and includes considerations of access to resources, land tenure and livelihoods.	0%	100 % of all plans and policies developed are gender responsive
				% of policies and plans addressing women and men's access to resources and participation in INRM	Plans and policies not developed	100 % of all plans and policies developed are gender responsive
				Level of women's empowerment to provide inputs into the revised planning framework for the INRM National Parks and Protected Areas System Plan[133]	Level of empowerment: 0	Level of empowerment: 3
	Output 1.4: Enhanced financial sustainability	New and existing finance mechanisms for Trust Fund capitalization (i.e. revenue	▪ Sensitization and awareness raising of new and existing financial mechanisms with an emphasis on the equal participation of all	% women and men earning an income from new and existing	0	50% of women earning an income from new and

women beneficiaries.

[133] Level of empowerment regarding the process of informing the development of the revised planning framework: 0= is not familiar with the processes and needs support to obtain benefit, 1= is somewhat familiar with the processes but needs support to obtain benefit, 2= knows the processes but does not feel secure without support to obtain benefit, 3= puts knowledge of the processes into practice, does not need support to benefit from the process, 4= knows the processes and provides support to people who are not familiar with how to benefit from the process of informing the development of the revised planning framework. The level of empowerment will be measured through a survey-type instrument to measure scale (Likert-type with affirmations); the survey will be applied at the beginning and the end of the intervention with the women beneficiaries.

	framework for Protected Areas System	generating PA user fee system, cruise ship fees, airport fees, voluntary hotel/dive shop contributions, PES, other) facilitates women and men's access to new sources of livelihoods, increase women empowerment and participation in INRM	members of society. ▪ Development and implementation of gender responsive data collection tools to inform the development of the financial mechanism. ▪ As part of gender responsive data collection implement community-based consultations with women, women leaders and representatives of women's organizations, rural women and other vulnerable groups to inform the development of the financial mechanism. ▪ Design of gender responsive financial mechanisms which includes but is not limited to supporting access of socially excluded and vulnerable groups including rural women to livelihood initiatives. ▪ Validation workshops held to ensure relevant stakeholder support for proposed gender responsive finance mechanisms.	financial mechanisms		existing financial mechanisms
				▪ Data disaggregated by sex, age, community/PA and livelihoods as created from the new financial mechanisms. ▪ Number of men and women participating in consultations on the finance mechanisms.	0	100% of data collected disaggregated by sex, age, community/PA and livelihood activity
				% of financial mechanisms developed that are gender responsive.	0	100% of financial mechanisms developed are gender responsive 100%of proposed gender responsive finance mechanisms validated by relevant stakeholders
					0	50% of the participants of each consultation should be women
	Output 1.5: Strengthen institutional capacities for INRM (BD/SLM/CSA/ Gender responsiveness) to support conservation of biodiversity and	Gender mainstreaming in the recipients of training under this output especially in the areas of low women participation	▪ Development of the criteria, reflective of local circumstances including in skills areas where women's access to participating is limited, for selection of training participants ▪ Ensure women benefit from the training	▪ No. of men and women participating in the training. ▪ No. of men and women identified who fit the criteria/are eligible to participate in the training exercise	0	At least 70% of eligible women participate in the training

	reduce land degradation.			and % of these men women who are trained		
				% of increase of women in specific training and skills area	0	30% increase of women in new/specific skills
2.	Output 2.1: Central Mountain Range Forest Reserve is legally gazetted, demarcated and operationalized	The operationalization of the PA system takes into consideration the access and use of natural resources and ecosystem services and levels of participation of women in decision making in INRM, ensuring the equitable distribution of the benefits of the PA System and the participation of women, women's representational groups in the organizational process.	▪ Awareness and sensitization among decision makers and local stakeholders on the importance of women's participation and involvement of local stakeholders in the operationalization of the PA ▪ Development of gender responsive tools for the collection of gender based socio-economic data ▪ Conduct a Gender responsive socio-economic analysis of the PA ▪ Define the criteria for the management committees and consider within them aspects related to the presence and active participation of women in the process of the management of the PA	% of women members the management committees of the PA system	The baseline will be established during the first year of project implementation	50% based on percent in the population
				Sex Disaggregated data exists, on age, community natural resource uses, land tenure, and household characteristics	Disaggregated gender responsive and sex data limited	100% of data disaggregated by sex, age and community/natural resource use, land tenure, household characteristics PA
			• Collect gender data including sex disaggregated data, age, community, household income, use of natural resources and livelihood activity of the direct beneficiaries (men and women) of the PA, as part of the baseline socio-economic-livelihood survey and analysis in Component 1. ▪ Stakeholder consultations for the development of the MARINE PARK conservation zoning includes the active participation of women and other socially vulnerable groups. ▪ Women involvement and participation in the Multi-stakeholder committee and pilot community co-management arrangements (supported by MOUs) in place along with	% of women and men who earn a livelihood from of the PA's natural resources and ecosystem services	PA beneficiaries baseline not established	50% of women earn a livelihood of the PA natural resources and ecosystem resources
				% of women who garnered a livelihood from the PA and reported increase in income over a 4-year period	Baseline to be determined	TBD

			sustainable finance mechanisms (1.4) and site operationalization reflect gender balance and equity.			
	Output 2.2: Leeward Coast Marine Park legally established, with conservation zones demarcated and operationalization initiated	The legalizations of the MARINE PARK take into consideration the access and use of natural resources and ecosystem services and levels of participation of women in decision making in INRM, ensuring the equitable distribution of the benefits of the MARINE PARK and the participation of women, women's representational groups in the operationalization processes and increase their livelihood opportunities	▪ Awareness and sensitization among decision makers and local stakeholders on the importance of women's participation and involvement of local stakeholders in the operationalization of the MARINE PARK ▪ Conduct a Gender responsive socio-economic analysis of the MARINE PARK, as part of the baseline socio-economic-livelihood survey and analysis in Component 1. ▪ Conduct a gender analysis of proposed financial mechanisms ▪ Develop financial mechanisms with the active participation of women and women representative organizations and institutions ▪ Design of financial mechanisms addresses issues pertaining to socially excluded and vulnerable groups including rural women ▪ Financial mechanism design increases women's access to new sources of income contributing to household incomes of families ▪ Define the criteria for the management	% of women members of the management committees of the PA system	The baseline will be established during the first year of project implementation	50 % based on percent in the population
				Gender responsive socio-economic data/statistics including sex disaggregated data exists	Sex disaggregated data/gender responsive data are limited	100 % of data disaggregated by sex, income levels, use of natural resources and ecosystem services, livelihoods type and community
				% of women direct beneficiaries of the developed PA financial mechanisms	PA financial mechanisms baseline not established	50 % of women direct beneficiaries of the PA

			committees and consider within them aspects related to the presence and active participation of women and men in the management of the MARINE PARK ▪ Collect disaggregate gender data of the direct beneficiaries (men and women) of the MARINE PARK, as part of the baseline socio-economic-livelihood survey and analysis in Component 1. ▪ Ensure Women's participation in the consultations for the design and development of the Conservation Zone use guidelines ▪ Conservation Zone use guidelines addresses issues pertaining to socially excluded and vulnerable groups including rural women ▪ Financial mechanism design increases women's access to new sources of income contributing to household incomes of families	% of women who garnered a livelihood from the PA and reported increase in income over a 4-year period	Baseline to be determined	TBD
	Output 2.3: Chatham Bay Wildlife Reserve is legally gazetted, demarcated and operationalized, with species protection and management in place	The operationalization of the National Park takes into consideration the access and use of natural resources and ecosystem services and levels of participation of women in decision making in INRM, ensuring the equitable distribution of the benefits of the National Park and the participation of women, women's representational groups in the operationalization processes	▪ Awareness and sensitization among decision makers and local stakeholders on the importance of women's participation and involvement of local stakeholders in the operationalization of the PA ▪ Development of tools for the collection of gender data, as part of the baseline socio-economic-livelihood survey and analysis in Component 1. ▪ Conduct a Gender responsive socio-economic analysis of the PA ▪ Define the criteria for the management committees and consider within them aspects related to the presence and active participation of women and men in the management of the PA ▪ National Park benefits women and results in their increased access to livelihood	% of women members the management committees of the PA system	The baseline will be established during the first year of project implementation	50 % based on percent in the population
				Disaggregated gender data exists	Disaggregated gender data limited	100 percent of all data disaggregated by gender
				% of women direct beneficiaries of the PA	PA baseline not established	50 % women direct beneficiaries of the PA

			opportunities and the increase of their incomes ▪ Collect disaggregate gender data of the direct beneficiaries (men and women) of the PA.	% of women who garnered a livelihood from the PA and reported increase in income	Baseline to be determined	TBD
	Output 3.1: Improved SLM practices in 3 upper watershed landscapes in and surrounding the Central Mountain Forest Reserve, with watershed management plan developed and implementation initiated in the pilot Ridge to Reef site.	Improved SLM practices results in women's increase participation in SLM, CSA and watershed management leading to increase access to livelihood opportunities and incomes from the Forest Reserve	▪ Awareness and sensitization among decision makers and local stakeholders on the importance of women's participation and involvement of local stakeholders in the operationalization of the PA ▪ Development of tools for the collection of gender data ▪ Conduct a Gender responsive socio-economic analysis of the PA, as part of the baseline socio-economic-livelihood survey and analysis in Component 1. ▪ Define the criteria for the management committees and consider within them aspects related to the presence and active participation of women in the management of the PA ▪ National Park benefits women and results in their increased access to livelihood opportunities and the increase of their incomes ▪ Collect disaggregate gender data of the direct beneficiaries (men and women) of the PA, as part of the baseline socio-economic-livelihood survey and analysis in Component 1.	% of women members of the management committees of the PA system	The baseline will be established during the first year of project implementation	50 % based on percent in the population
				Disaggregated data by sex, age, community, natural resource use and land tenure exists	Disaggregated gender data limited	Data collected disaggregated by sex, age, community, resource use, land tenure
				% of women direct beneficiaries through a livelihood of the SLM and CSA practices of the PA	PA baseline SLM and CSA not established	50 % women direct beneficiaries, through a livelihood, of the SLM and CSA practices of the PA are women
				% of women who garnered a livelihood from the PA and reported an increase in income	Baseline to be determined	TBD
	Output 3.2: National learning centers and demonstration sites on CSA and SLM	Women's full participation in the demonstration plots, field studies and training leading to acquisition of new knowledge and techniques which will empower women and increase their livelihood possibilities resulting in an increase in incomes	▪ Develop selection criteria for the selection of field studies and training beneficiaries that considers women and other socially vulnerable group's participation in SLM and CSA, agriculture ▪ Specialized sensitization and awareness training for women on the intended capacity building activities including demonstrations, field studies and training ▪ Selection of women using criteria established	▪ % of women beneficiaries selected for demonstration farms, field studies and training beneficiaries ▪ % of women reporting new	Training not commenced Training not commenced	Minimum of 30 percent of training recipients and demonstrations farms 10 % of female

			as intended recipients of demonstrations, field studies and training ▪ Training materials are in simple language, with positive portrayal of women, and mentions women.	livelihood ▪ % of women activities reporting an increase in income over a 3-year period		recipients of training
	Output 3.3: Sustainable livelihood programme developed	Participation of women in the small businesses and alternative livelihood opportunities resulting in women's increased access to livelihood opportunities and new markets for products produced resulting in increased incomes of women	▪ Specialized sensitization and awareness training for women on the intended capacity building activities ▪ Gender analysis of the value chain of selected crops and CSA, SLM and conservation agricultural practices ▪ Market Analysis and the development of an action plan to address inequalities identified ▪ Capacity building activities to increase women's participation in the alternative livelihood activities and small business support program ▪ Programs to ensure women's access to new and emerging markets to support increases in incomes. ▪ Develop selection criteria for the selection of agro-processors, small businesses and alternative field studies and training beneficiaries that considers women and other socio-economically vulnerable group's participation in SLM and CSA, agriculture ▪ Women's participation in livelihood activities and small businesses supported through selection by established inclusive criteria ▪ Collection of disaggregated gender data	% of women beneficiaries selected for demonstration farms, field studies and training beneficiaries	Training not commenced	Minimum of 30 % of training recipients and demonstrations farms
				% of women reporting an increase in income	Training not commenced	10% of female recipients of training
				Data to be disaggregated by sex, age, community, livelihood type, income and time period	Data collection not started	100 % of data disaggregated by sex, age, community, natural resources use, livelihood type
Component 4: Knowledge management for SLM, CSA and biodiversity conservation	Output 4.1: Technical knowledge captured, experiences and lessons learned will be disseminated	Ensure that the systematization of the experiences and lessons learned reflect the participation of women	▪ Incentivize the systematization of groups of beneficiaries' (men and women) experiences within the project. ▪ Consolidate the successful experiences in mainstreaming of gender and support the systematization of these experiences.	Number of systematized experiences reflect the lessons learned incorporating a gender focus	0	100% experiences reflect the lessons learned in incorporating the gender focus
				Number of successful experiences with portrayal and mention of women	0	50% experiences include women's experiences

	Output 4.2: Media products will promote outreach and increased public awareness/environmental education of gender inclusive SLM, CSA and biodiversity conservation	Media products produced document the participation of women in all project activities	▪ Ensure that the materials produced encourage the use of inclusive gender-neutral language and that women are depicted ▪ Ensure that women participation is reflected in the materials and studies that are produced.	Materials produced use inclusive language with depictions of women	0	100 % the materials produced use inclusive visual and written language and reflect women participation
	Output 4.3: Monitoring and evaluation of project implementation will be conducted through periodic field visits, tracking tool assessments, mid-term and final evaluations of project	Women participate in all the monitoring and evaluation activities of the project.	▪ Include in the detailed M&E system of the project the disaggregation of data by sex and gender analysis to ensure the full ownership of these indicators in the priority areas. These will be completed in the initial phase of the project. ▪ Ensure the adequate inclusion of practical gender and gender specific indicators in project results framework with qualitative and quantitative monitoring data disaggregated for men and women. ▪ Ensure a proportionate number of men and women respondents are included in the project surveys and robust baseline data collected, where possible. ▪ Assess the impact of dissemination and/or training activities in groups of men and women through pre- and post-activity surveys e.g. gender focus groups ▪ Conduct the documenting and assessments and share gender experiences with relevant bodies (e.g. Gender Affairs Department, sharing experiences, and forging partnerships. ▪ During the evaluation workshop, establish differentiated spaces for consultation and dialogue, only with female referents on the one hand and male referents on the other.	Women participation in monitoring and evaluation activities	0	100 % of project M& E activities with women participation
				Collection of Sex disaggregated data in monitoring and evaluation system	0	100 % of data disaggregated by sex, age, community, natural resources use, livelihood

ANNEX H. UNDP RISK LOG

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Capacity building efforts in Government are undermined by limited available financing for maintaining adequate levels of trained personnel	February, 2017	Organisational	P=3 I=4	The project will undertake capacity building activities only after a strategic assessment of existing capacity, needs and limitations. Capacity will be strengthened across different departments responsible for PA management to spread the administrative burden. Unintended impacts to BD conservation and SLM in the target landscape as a result of limited institutional capacities will also be addressed through the Project's activities focusing on strengthening capacities of national institutions, as well as capacities at the community and producer level. Community co-management opportunities will be assessed, and appropriate co-management systems will be explored to allow non-state actors to support key PA management processes. The project will support the development of a sustainable financing framework, emphasising direct financial				

					support to the key agencies responsible for PA management.				
2	Lack of commitment of Government and local stakeholders to biodiversity conservation and PA management	February, 2017	Political	P=3 I=3	The project will undertake strategic awareness-raising activities, informed by comprehensive assessments of knowledge gaps and behaviours. Among farmers, awareness and buy-in will be sought through CSA and SLM demonstration projects and the provision business-development and livelihood support services. Lessons learned will be disseminated to facilitate continuous awareness raising. At the Government level, targeted advocacy interventions will be undertaken to encourage legislative processes among key policy-makers.				
3	Natural disasters (esp. hurricanes) threaten forest habitat and livelihoods	February, 2017	Environmental	P=3 I=3	A National Disaster Management Plan has been developed under the Office of Disaster Management to identify key partners and actions for disaster preparedness and response. The Government of SVG is also part of the Regional Disaster Vulnerability Reduction Project (RDVRP), with support from the Caribbean Disaster Emergency Management Agency (CDEMA).				

					The Project will promote overall ecosystem and community resilience through BD and SLM practices and is also supporting an increase in the PA estate and biological connectivity which, through strengthened ecosystem integrity, can increase overall resilience to the impacts of climate change				
4	Implementation of activities reinforces existing gender disparities, undermines gender equality objectives and reduces sustainability of project interventions	February, 2017	Strategic	P=2 I=3	The project will mainstream gender equality across all components and activities by encouraging not only equal representation of women among beneficiaries, but also through ensuring that all outputs are gender responsive. The project will hire a gender specialist to support this process and will actively engage local gender equality groups and the UNDP's Gender Focal Point to ensure gender equality integration across planning, implementation and monitoring activities. The Project also developed a Gender Analysis and Action Plan which is incorporated into Project design, and project activities will ensure that both women and men are able to participate meaningfully and equitably, have equitable access to Programme and Project				

					resources, and receive comparable social and economic benefits.				
5	Project interventions designed to reduce unsustainable use of natural resources could adversely impact livelihoods for those engaging in those practices.	February, 2017	Strategic	P=2 I=3	Any proposed restrictions on land use will only impact a small area of land, limiting the potential impact on farmers. Any impacted farmers will be prioritised for business development and livelihood support to minimise any dislocation. The Project will develop a Livelihood Action Plan (Output 1.2) as well as management plans that will incorporate livelihood needs prior to the start of relevant activities.				

ANNEX I. RESULTS OF THE CAPACITY ASSESSMENT OF THE PROJECT IMPLEMENTING PARTNER AND HACT MICRO ASSESSMENT

Included in ProDoc package as separate file.

ANNEX J. ADDITIONAL AGREEMENTS

Included in ProDoc package as separate file.

ANNEX K. UNDP PROJECT QUALITY ASSURANCE REPORT

Included in ProDoc package as separate file.

ANNEX L. TARGET LANDSCAPE PROFILE

Selection of Project Intervention Sites

The Buccament watershed was selected as the project's ridge to reef site due to its 1) increasing population and infrastructure concentration, with increasing demographic and related agricultural and development pressure on natural resources, 2) high socio-economic vulnerability to natural disaster due to its dependence on agriculture and threats to sector loss due high risk of flash floods and landslides[134] with high occurrence of these in the past years, 3) high occurrence of unsustainable land management and agricultural practices in an upper watershed, 4) proximity to the country's largest markets for agricultural produce and processed products, and 5) importance of ecosystem services provided by the watershed, providing 45% of St Vincent's drinking water supply. The Central Mountain Forest Reserve encompasses the island's entire upper mountain range and upper watersheds, covering 13,214 ha. The CMFR, Buccament watershed and the Leeward Coast Marine Park (proposed) provide geographical continuity of the interventions sites, from ridge to reef, as do the 3 adjacent watersheds whose area of influence covers 31% of southern SVG. The Yambou and Kingstown watersheds, where climate resilient agricultural practices will be supported, combined provide the population of Saint Vincent with around 61% of its drinking water.

Target Landscape Profile: Central Mountain Forest Reserve

Environmental

The island of St Vincent is divided by a central mountain range which starts in the north with La Soufriere (1,234 m)—an active volcano and the island's highest point. The Morne Garu mountain range (with Richmond peak, 1,077 m and Mount Brisbane, 932 m) lies to the south of La Soufriere, and then Grand Bonhomme (970 m), Petit Bonhomme (756 m) and Mount St Andrew (736 m) are south of this. A large number of very steep lateral ridges emanate from the central massif culminating in high, rugged and almost vertical cliffs on the (eastern) leeward coast, while the windward coast is more gently sloping, with wider, flatter valleys. The average annual rainfall is 3,800 mm inland, the forested interior of St Vincent can receive as much as 5,100 mm. Natural vegetation corresponds to elevation, geology and rainfall, and includes rainforest (mostly between 300 and 500 m), elfin woodland and montane forest (above 500 m), palm break (between the rainforest and montane forest, and in disturbed areas).

The physical and environmental conditions of rainfall, soils, elevation, terrain, and exposure to the trade winds, results in a remarkable diversity of species, ecosystems and forest types, including: i) Elfin Woodland, found on exposed summits above 500 m on both sides of the central mountains. They consist of pure stands of dwarfed trees about 3 m in height covered with epiphytes. This vegetation type is commonly associated with the Palm Brake vegetation type; ii) Rain Forest - confined to areas in the upper Colonaire, Cumberland and Buccament Valleys between 300 m and 488 m; iii) Palm Brake – the sub-climax type typically at elevations over 500 meters arising after disturbances such as landslides or tree-falls (opening up the forest canopy). The land is covered initially by mosses, then by small tree ferns and *Heliconia sp.* followed by the characteristic Mountain Cabbage *Prestoea montana*; iv) Secondary Rain Forest: This type describes the resultant forests arising from disturbances from volcanic eruptions, hurricanes and human activity. The largest areas lie around the Soufriere Mountains. The vegetation ranges from almost bare soil on the upper slopes of the Soufriere volcano to significant stands of new forest at lower elevations.

[134] Flash Flood Hazard Map, CHARIM

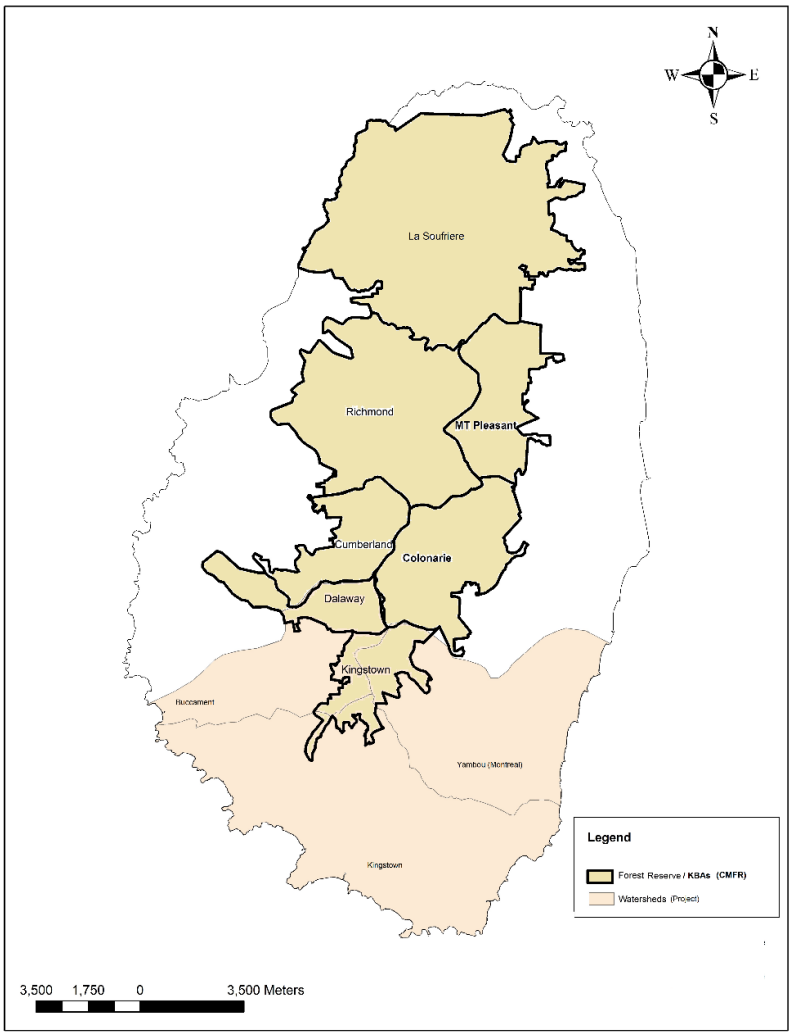

Figure 2. Proposed Central Mountain Forest Reserve (with component Forest Reserves / KBAs) and 3 target watersheds

The IUCN Red-listed EN[135] endemic frog *Pristimantis shrevei, is one of the 4 species documented in the CMFR. It is St Vincent's only endemic frog (one of 4 species total) has exhibited continuing decline. It is habitat-restricted* to the highest elevations (275-922 m elevation) *and appears vulnerable to environmental perturbations, including the presence of the introduced frog Eleutherodactylus johnstonei*[136]*, and the Chyrtrid fungus (presence confirmed on St Vincent in 2015*[137]*). Chironius vincenti*, the St Vincent Blacksnake, is a CR single island endemic, known only Cumberland Forest Reserve, in habitat also inhabited[138] by the St Vincent Parrot *Amazona guildingii*. The first *C. vincenti* specimen was collected by the Forestry Department in 1987, and only most recently documented in 2005 due to its extreme rarity, even in areas of apparently good rainforest habitat. Causes of its decline are unknown

[135] Blair Hedges, Robert Powell. 2004. *Pristimantis shrevei*. The IUCN Red List of Threatened Species 2004: e.T56961A11561177. http://dx.doi.org/10.2305/IUCN.UK.2004.RLTS.T56961A11561177.en. Downloaded on **16 June 2018**.

[136] Rodríguez Gómez CA, Díaz-Lameiro AM, Berg CS, Henderson RW, Powell R. 2017. Relative abundance and habitat use by the frogs *Pristimantis shrevei* (Strabomantidae) and *Eleutherodactylus johnstonei* (Eleutherodactylidae) on St. Vincent. Caribbean Herpetology 58:1–12.

[137] Sweeney R (2016) First detection of the amphibian chytrid fungus (*Batrachochytrium dendrobatidis*) in St. Vincent and the Grenadines. Herpetological Review, 47, 212–214.

[138] *The St. Vincent (Lesser Antilles) herpetofauna: Conservation concern*. Available from: https://www.researchgate.net/publication/233616831_The_St_Vincent_Lesser_Antilles_herpetofauna_Conservation_concern [accessed Jun 16 2018].

though may be due to historic and ongoing pressures, and targeted research is recommended to collect both current data and identify possible threats / causes to its rarity.[139] *Amazona guildingii,* St Vincent's VU single island endemic parrot and National Bird, though its decline has halted to due habitat conservation, law enforcement (legal protection) and public awareness campaigns, its population remains small and its range limited. Numbers increased from 370-470 individuals in 1982 to approximately 519 in 2002, and then to c.734 in 2004, but no census has since been conducted. Along with extreme climatic events, loss of nesting trees is exacerbated by the introduction of the nine-banded armadillo *Dasypus novemcinctus,* digging causing them to topple and reducing the number of suitable nest trees[140]. The Whistling Warbler *Catharopeza bishopi* and EN endemics, is found primarily in the upper elevations (elevations of 300-1,100 m, but probably mostly below 600 m) of the Colonaire, Perseverance watersheds and Richmond Peak, within the proposed Central Mountain Forest Reserve. It is found primarily in primary, elfin and palm brake forests which in 1988, 80 km2 supported an estimated 1,500–2,500 territorial males. Habitat loss from the La Soufriere volcano eruptions 1902 and 1979 resulting in extensive habitat loss, after 1902 the warbler was extirpated from the northern mountain region.

Included in the proposed Central Mountain Forest Reserve are 6 KBAs (1 designated FR, 4 proposed FRs, 1 proposed National Park) that will be consolidated into one Central Mountain Forest Reserve (13,216 ha) under this Project. Although all lands above the 1,000 ft (305m) contour in SVG are Crown lands (the above-mentioned KBAs), only the Cumberland Forest Reserve (1,020 ha) and the Parrot Wildlife Reserve (3,075 ha) are legally gazetted. Furthermore, the Parrot Wildlife Reserve overlaps geographically with 3 of the proposed Forest Reserve (see Table 1).

Socio-economic

The mountain range is comprised of almost all of the settlements of the island of St Vincent including the settlements mentioned above. It encompasses all the electoral districts of St Vincent. The population of the mountain is therefore the population of main land St. Vincent. Some of the communities which are in the Forest Reserve and not mentioned in the watershed are as follows:

Colonarie is a small rural community located on the North Eastern side of St. Vincent and is approximately 13.4 Sq. miles. It is located on the banks of the Colonarie River, which is one of the longest watercourses in SVG, flowing from Grande Bonhomie in the North East to the Atlantic Ocean on the Central East Coast. According to UNISDR[141], the vegetation along the riverbank consists mainly of shrubs, and due to its steep topography and relatively high moisture content of the soil, erosion is common which threatens stability of the public road and presents medium risk to the community. Colonarie has a population of 6,849 (6.3 percent of the total population in SVG); a decrease from the population size of 7,490 in 2001 (decreased by 8.6 percent), and 7,890 in 1991 (Commonwealth, 2018). The sex ratio recorded in the 2012 Census was 1.04; 3,494 males and 3,355 females. A UNISDR (2009) report, stated that the extended family unit is evident in Colonarie. There are some nuclear households and a few single parentages, in which a woman heads the household in most instances[142]. The community is well developed with concrete constructed houses, and residents having access to electricity, water, telephone, cable television, internet, health clinic, police station, a secondary school and a primary school. ISDR (2009), reported that the main issues affecting the community are unemployment, teen-aged pregnancy, drug abuse, and lack of recreational activities[143]. The main economic activity of the area is farming where persons cultivate bananas, citrus, ground provisions and vegetables. However, most of the farm lands are inaccessible due to them being located on the opposite end of the Colonaire River from the community. As a result, the area is under cultivated.

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[139] Daltry, J.C., Henderson, R.W. & Powell, R. 2016. *Chironius vincenti* (errata version published in 2017). The IUCN Red List of Threatened Species 2016: e.T4672A115069815. http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T4672A71739530.en. Downloaded on 16 June 2018.

[140] Culzac-Wilson, L. (2005) *Species conservation plan for the St Vincent Parrot* Amazona guildingii. Puerto de la Cruz, Tenerife: Loro Parque Fundación.

[141] UNISDR. 2009. *UNISDR terminology on Disaster Risk Reduction.* Geneva. Retrieved from: https://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf

[142] NBCSVG, 2015. http://www.nbcsvg.com/2015/04/27/dr-ralph-gonsalves-housing-programme-training/. Accessed 22 July 2018

[143] Ibid

Rose Hall has the distinction of being the highest settlement in St. Vincent and the Grenadines at 1142 feet. It is located to the East of Westwood and South of the village of Rose Bank, North of Spring Village and West of Byera on the Windward coast. Rose Hall has a population of 522 males and 442 females (2012 Population Census). The main economic activity in the area is farming with several root crops and vegetables being grown. Being high and mountainous, terrace farming is practiced by some farmers in the area. The main crops cultivated are bananas, citrus, ground provisions and vegetables. The area also possesses a number of agro-processors mainly women involved in the production of sauces and other condiments. The family structure in the area consists of a blend of nuclear and extended. The area has a rich cultural heritage and a cultural drumming group that performs across the country. There is also low level of crimes in the area with most criminal activity being predial larceny. The area does have many illegal marijuana farmers who inhabit the high peaks of the ridges for cultivation of their crops.

Chateaubelair can be found on the on the Leeward (West) coast of the island and South of the Soufriere volcano. The village's main economic activity is farming and fishing. Spring Village is located on the Leeward side of the island South of the village of Rose Hall. It has a population of 204 males and 183 females. The village was one of several severely affected by a flood in 2006. The infrastructure of the village was severely damaged, and the village was cut off from the rest of the communities. There was some infrastructural development in the village after the floods including a new bridge, 82 metres in length which is scheduled to be open in the week of March 20, 2018 (Human Development Report, 2016; Population and Census Report, 2012). The main livelihood activity in the village is agriculture and fishing with several farmers concentrating on dasheen and other tuber root productions. There is also a limited amount of in-land fishing of cray fish and other crustaceans.

Target Landscape Profile: Three (3) pilot watersheds (Buccament, Kingstown and Yambou)

The Island of Saint Vincent has a total area of 34,544 ha, is 30 km long, 18 km wide and split into 13 watersheds, all of them originating in the steep slopes of the Central Forest Reserve. On average, St. Vincent receives 219 cm of rainfall per year, with the wet season occurring in June-November and the dry season between January and May. The rainy season, during which the island receives around 70% of its total annual rainfall, coincides with the period of highest tropical storm activity in the region [144]. Streams tend to be short and straight with steep and gorge-like upper courses, and with their lower reaches broadening out into small delta-shaped alluvial flats.[145] The project targets three neighboring watersheds in the South of the Saint Vincent – Buccament, Kingstown and Yambou - covering 10,587 ha, 31% of Saint Vincent's total area. The project targets three neighboring watersheds, meeting above Kingstown, the capital, in the southern part of the Central Forest Reserve at 649 m of altitude. These are: Buccament (2026 ha) with 770 ha (38%) being part of the Central Forest Reserve and Dallaway Forest reserve, Kingstown (5225 ha, 15% of Saint Vincent), with its upper 183 ha being part of the Central Forest Reserve and Yambou (3336 ha, 10% of Saint Vincent) with the upper 333 ha (10%) in the Central Forest Reserve. The meeting point of the Buccament, Kingstown and Yambou Watersheds is situated at 649 m of altitude, some 8 km from the coastline. The Kingstown Forest Reserve (KBA/IBA) is made up of the 3 Project target upper watersheds that together produce over 25% of the country's potable water and that also encompasses the Island's highest peak, Mt St Andrew.

Environmental

Buccament Watershed

The Buccament watershed (2026 ha) is situated in a narrow valley of the Saint Andrew Parish on the South Leeward side of Saint Vincent and is drained to the sea through a narrow Buccament Bay (400 m wide, with 1,3 km coastline) by a single main river (Buccament River). Consistent with the topography of the Leeward side of the island, the Buccament watershed is characterized by steep ridges (including slopes above 30 degrees) and narrow valleys, extending down to the sheltered coast[146]. At its highest point 976 m of elevation, in the proposed Central Mountain Forest Reserve (Crown Land) which encompasses two of the island's major potable water systems, supplying about 45% of the country's water. Rainfall can exceed 5,080 mm annually. The total length of all the streams in the

[144] Environmental Management Framework. RDVRP. 2014.
[145] NAP (draft). 2018
[146] National Adaptation Plan (NAP). Government of St Vincent and the Grenadines. 2015 - 2020.

Buccament Watershed is around 117 km, with a density of 60 m of a stream/ha. The soils of St. Vincent are volcanic, and as with the neighbouring Cumberland Watershed, the Buccament watershed contains primarily pyroclastic deposits of pre-Soufriere volcano centre, red scoria deposits of spatter, alluvial and rework deposits. Nine (9) soil types are found, predominantly loam and clay loam, with skeletal soil, Greiggs Loam and Clay Loan and St. Vincent Loam & Clay Loam the most predominant[147]. The Buccament watershed supplies 45% of Saint Vincent's drinking water (1,5 M gallons/ per day[148]) from the Vermont Drinking Water Treatment Plant during the rainy season, reduced by 35% during the dry season. The eastern portion of the Buccament Watershed with the proposed CMFR overlaps with the proposed Kingstown Forest Reserve (KBA/IBA) at its most southernly end. This KBA/IBA contains is made up of the 3 Project target upper watersheds that together produce over 25% of the country's potable water. Montane Rain Forest/ Forest Evergreen- from 455 m to 915m with Elfin Woodland/Cloud Forest/ Forest Evergreen Cloud occurring above 914.4 m[149]. Secondary rain forest/plantations and rain forest occur mostly between 300m and 500m. Riparian vegetation is found along the banks of the river that extends down to dry scrub woodland/ dry deciduous forest in the lower coastal elevations.

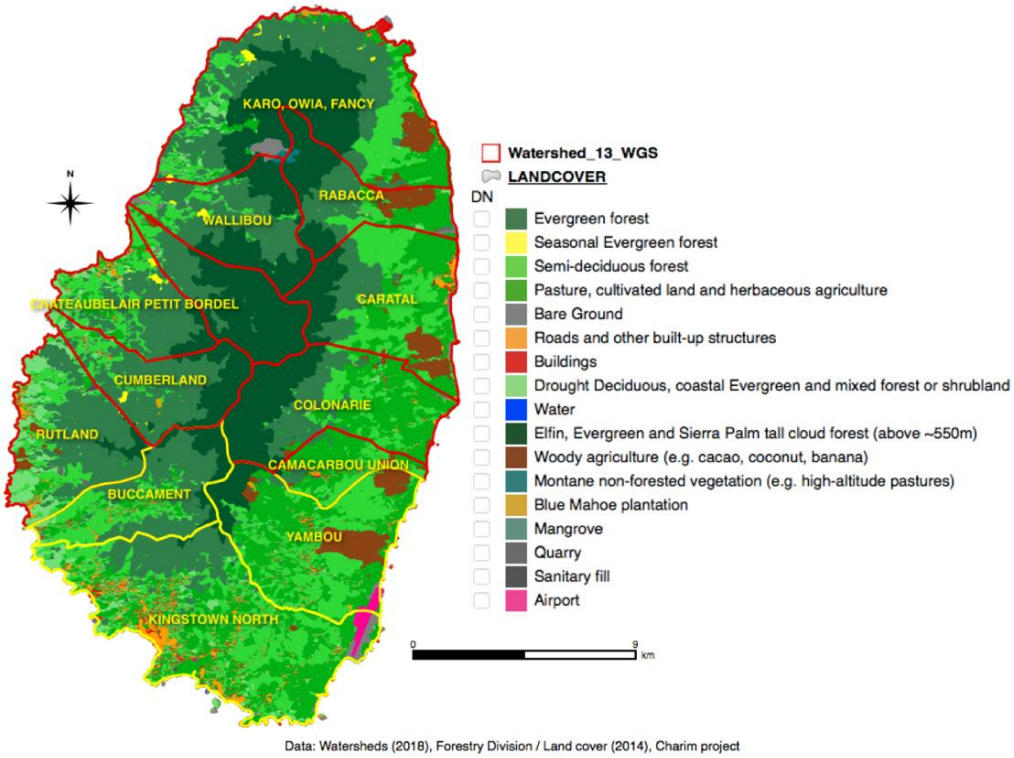

Figure 3. St Vincent watershed map and land cover. Forestry Division 2014 / Charim Project.

[147] Edwards M. J. 2014. Draft integrated watershed management Plan Cumberland Watershed Technical Report. Government of St Vincent and the Grenadines.

[148] Central Water and Sewerage Authority. 2015. Retrieved from: http://www.cwsasvg.com/projects/National%20Water%20Resources%20Management%20Unit.pdf

[149] Beard 1966

The upper parts of the watershed (770 ha, 38% of the total watershed) falls within the entire Dalaway Forest Reserve (KBA[150] and IBA[151]) and partially overlaps with the Kingstown Forest Reserve (KBA[152] and IBA[153]), 2 of 6 proposed FRs within the NPAPSP (2010-104) to be consolidated into the proposed Central Mountain Forest Reserve. Ninety percent (90%) of the proposed Dalaway Forest Reserve overlaps with the designated 3075 ha St. Vincent Parrot Reserve and is habitat of the endangered endemic St. Vincent Parrot (*Amazona guildingii*). The most recent 2004 census[154,155] estimated 164 individuals within this site, found primarily within the mature rainforest between 125 m and 1,000 m. Occasionally, birds forage in nearby farmland and plantations, feeding on fruit trees. The Dalaway Forest Reserve is also a habitat of the Critically Endangered St Vincent Black Snake (*Chironius vincenti*) and endangered endemic Tree Frog (*Eleutherodactylus shrevei*). Fourteen (14) Lesser Antilles Endemic Bird Area (EBA) restricted-range birds, including the Endangered Whistling Warbler *Catharopeza bishopi* and the above-mention ed Vulnerable St Vincent Amazon *Amazona guildingii*. Other regionally-endemic species[156] and species of note include the Scaly-naped Pigeon *Patagioenas squamosa*, Shorttailed Swift *Chaetura brachyura* and the threatened endemic race of House Wren *Troglodytes aedon*.

Kingstown Watershed

The Kingstown watershed is Saint Vincent's second largest one (5225 ha, 15% of St Vincent), spreading over Saint Andrew and Saint George Parishes the South part of the island. It is also the most densely inhabited watershed, with up to 2 623 persons per square kilometer in the Kingstown district[157] and with over 52 thousand buildings covering 463 ha, not including transport infrastructure and other covered and cemented surfaces. Eight main streams drain the watershed to the sea.

The upper part of the watershed overlaps with the Central Forest Reserve in the proposed Kingstown Forest Reserve (KBA[158] / IBA[159]), which constitutes only 183 ha of Kingstown watershed and borders the Buccament Watershed to the east. This IBA, which maintains primary and secondary rainforest and dry scrub woodland, contains portions of St Vincent Amazon *Amazona guildingii* habitat and range that were omitted during the establishment of the St Vincent Parrot Reserve in 1987[160]. As with the adjacent Dalaway Forest Reserve (upper Buccament Watershed), this KBA/IBA supports populations of all 14 Lesser Antilles EBA restricted-range birds, including the Endangered Whistling Warbler *Catharopeza bishopi* and Vulnerable *A. guildingii*. Other species of note include Common Black-hawk *Buteogallus anthracinus*, Scaly-naped Pigeon *Patagioenas squamosa*, Shorttailed Swift *Chaetura brachyura* and the threatened endemic race of House Wren *Troglodytes aedon*. The IUCN Red-listed Critically Endangered St Vincent blacksnake *Chironius vincenti* is found within this site, as are other endemic reptiles include the lizards *Anolis griseus* and *A. trinitatus*, and the regionally endemic congo snake *Mastigodryas bruesi*. Though not IUCN Red-listed, several

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150 BirdLife International. 2018. The World Database of Key Biodiversity Areas. Developed by the Key Biodiversity Areas Partnership: BirdLife International, IUCN, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Global Wildlife Conservation, NatureServe, Royal Society for the Protection of Birds, World Wildlife Fund and Wildlife Conservation Society. Downloaded from http://www.keybiodiversityareas.org on 08/06/2018.

151 BirdLife International. 2018. Important Bird Areas factsheet: Dalaway Forest Reserve. Downloaded from http://www.birdlife.org on 09/06/2018.

152 BirdLife International. 2018.

153 BirdLife International (2018) Important Bird Areas factsheet: Kingstown Forest Reserve. Downloaded from http://www.birdlife.org on 09/06/2018.

154 Forestry Department. 2004 St Vincent Parrot census, 2004. Kingstown, St Vincent and the Grenadines: Forestry Department, Ministry of Agriculture, Forestry and Fisheries. (Unpublished report).

155 Culzac-Wilson, L. 2005. *Species conservation plan for the St Vincent Parrot* Amazona guildingii. Puerto de la Cruz, Tenerife: Loro Parque Fundación.

156 Ivor Jackson and Associates. 2004. Master Plan: System of Protected Areas and Heritage Sites, St Vincent and the Grenadines. St John's, Antigua: Ivor Jackson and Associates (Unpublished report).

157 SVG's Pilot Programme for Climate Resilience, A report on Monitoring and Evaluation in Saint Vincent and the Grenadines, June 30, 2014

158 BirdLife International. 2018. The World Database of Key Biodiversity Areas. Developed by the Key Biodiversity Areas Partnership: BirdLife International, IUCN, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Global Wildlife Conservation, NatureServe, Royal Society for the Protection of Birds, World Wildlife Fund and Wildlife Conservation Society. Downloaded from http://www.keybiodiversityareas.org on 08/06/2018.

159. BirdLife International. 2018. Important Bird Areas factsheet: Kingstown Forest Reserve. Downloaded from http://www.birdlife.org on 09/06/2018.

160 Ibid

endemic plants are found including *Begonia rotundifolia*, the epiphytic *Peperomia cuneata* and *P. vincentiana*, forest orchid *Epidendrum vincentinum* and giant fern *Cyathea tenera.*

Despite of its high level of urbanization in the lower and mid watershed areas, Kingstown harbors Campden Park Forest Reserve and Kings Hill Forest Reserve. Kings Hill Forest Reserve (183 m of altitude) was established in 1791 to attract rain to an otherwise dry area and is home to 26 species of tropical trees and shrubs[161]. The eastern coastline of the watershed and around the South Coast Marine Park
The eastern coastline of the watershed and around the South Coast Marine Park with Young Island Wildlife Reserve is lined by sparse coral, dense seagrass and sands.

Yambou Watershed
Yambou, also known as Montreal watershed, is one of the major watersheds for potable water, wildlife species, timber logging and recreation[162]. St. Vincent's 3rd largest watershed, covers 3336 ha (10% of total SV area and 10% within the proposed CMFR) and is situated in the Saint George and Charlotte Parishes on the Windward side, characterized by a gentler relief with cliffs less steep. The Windward coast is shaped by the erosive power of waves, influenced by the North East Trade Winds. [163]There are 6 main streams draining the watershed into the sea. The lands by the Montreal Gardens, in the upper watershed, are an important source of drinking water. CWSA is relying on 7 intakes from the upper Yambou watershed. Marriaqua drinking water plant provides 15% of the islands drinking water supply.

Within the proposed CMFR, several reforestation and soil conservation projects were implemented in the past 30 years to preserve this important upper water catchment and to rehabilitate former banana and root crop production plots. These reforestation efforts resulted in reduced land slippage and soil erosion and water sedimentation.[164]

Socio-Economic

Demographic Aspects

The Yambou River Watershed is characterized by a rural and partly dispersed rural settlement structure. Settlements within the vicinity are Peruvian, Vale and Escape in the north, Akers and Calder in the west and Stubbs and Victoria Village in the south. These villages are located in the census divisions of Calliaqua, Marriaqua and Bridgetown, which due to their proximity to Kingstown, range among the fastest growing areas of mainland Saint Vincent. Stubbs is the most densely populated village in the watershed area, accounting for 39.1% of the population, followed by Victoria Village (15.2%) (Housing and Population Census, 2001). The area is mainly comprised of the former Argyle Estate. A transition from the plantation saw a number of significant social and demographic changes. Existing villages ceased to function as communities and individuals and households moved out of the estate to nearby settlements such as Calder, Stubbs and Akers. The former estate was sub-divided into various parcels, some of which were used for housing lots. Over time, some of the larger parcels have been further sub-divided due to inheritance practices, with each generation of an owner inheriting a proportion of the land.

On the western side of the island is the Buccament watershed. The area extends from an upland mountainous region down to the shoreline of the Buccament Bay. Although treated as a unit, the watershed is made up a several heterogeneous communities, linked by the Buccament River. The mid and upper Valley comprise the village communities of Peniston, New Peniston, Hope, Dubois, Vermont, Retreat, Francios, Greenhill, Fiddlepiece and Queensbury. Land ownership in the mid and upper valley is divided between estates, small private holdings and crown land. The main residential areas within the mid and upper valley straddle the road, and increasingly merge into one another. The forest reserve, water catchment area and Vermont nature trail are within the upper sections

[161] National Adaptation Plan (NAP) 2015 – 2020. Government of St Vincent and the Grenadines.
[162] St. Vincent and the Grenadines Macro Socio-economic Assessment of the Damage and Losses caused by Hurricane Tomas. 2011. Unpubl. Report. Economic Commission for Latin America and the Caribbean. Trinidad and Tobago.
[163] NAP 2015−2020.
[164] 5th National Report to the CBD. Government of St Vincent and the Grenadines.

of the valley[165, 166]. The lower valley comprises the village communities of Buccament Bay and Rilland Hill as well as Pembroke.

The Kingstown Watershed area has several communities such as Layou with an area of 11.1 sq. miles and is located north of Buccament. Layou has a population of 6,339 (5.8 percent of the total population of SVG), according to the 2012 Census. The sex ratio of the area was 1.07, with 3,275 males and 3,060 females. Clare Valley is located to the North West of Kingstown, and South East of Layou. Clare Valley is located to the North West of Kingstown, and South East of Layou. Clare Valley has a population of 1,107; 536 males and 571 females. The community of Bottom Questelles; a small beach and fishing community found in the parish of St. Andrew. According to the 2012 Census, Questelles has a population of 1,163; 571 males and 592 females and is located in the Parish of Saint Andrew. Barrouallie, also known as the whaling village, is approximately 12 km North-West of Kingstown. It is the largest city and the capital of the parish. The town is shaped into a hole whereby it is protected by the lofty mountain peaks of Pierre, Jacques Hughes Hill and Zion (local name) from volcanic eruptions.

Population data from the Population and Housing Census of 2012 show that the Layou district in which Buccament Valley is situated have seen little to no demographic change in areas surrounding the Buccament Watershed over the last decade. The area continues to have a significant youth population with an almost equal distribution of males (1390) and females (1410), but a higher ratio of males in the under 15 and under 30 age group. According to the Census (2012), the population of Buccament Valley numbers persons is approximately 2800 (approximately 1390 males and 1410 females).

Economic Aspects

Statistics on employment from the 2012 Housing Census differentiated by economic sectors show that for the district for which the Yambou River Watershed area is situated, 23.1% of the economically active population of the country resides. The Wholesale and Retail Trade Industry (16.9%) followed by the Agriculture, Forestry and Fishing and Construction industries, with 11.8% and 11.6%, respectively. Other important sources of employment were Public Administration (9.7%), Education (7.8%), Transportation and Storage (7.6%) and Accommodation and Food Service Activities (7.4%). The agriculture sector contribution was 5.9%. The low contribution of agriculture was a result of numerous challenges faced, including loss of preferential access to European Union (EU) markets, natural disasters, negative exogenous shocks and crop diseases. According to the Population and Housing Census Report (2012), Wholesale and Retail Trade (22.6%), Construction (14.2%) and Public Administration (9.4%) attracted the largest share of employed youth (15 – 24 years). The elderly employed population (60 years and over) were mainly engaged in small scale agriculture and subsistence farming (26.2%) and Wholesale and Retail Trade (18.8%).

The Buccament economy was supported by tourism with the opening and subsequent closure of a five- star Buccament Bay Beach Resort hotel. The Vermont Valley in the centre of Buccament is home to one of the country's prime eco-tourism sites, the Vermont Nature Trail. The agricultural economy has over 200 registered farmers and over 400 agricultural plots, which produce a wide variety of vegetables and root crops. The agricultural livelihoods are embedded in mainly subsistence with some commercial farming, of crops including cassava, peas, sorrel and sweet potatoes.

In the Kingstown watershed area, the small village of Bottom Questelles employs majority of its residents in its small fishing industry as well as the recreational industry, due to the popularity of its beach. The community of Barrouaille in the Kingstown Watershed is mainly engaged in agriculture and fishing, with the tradition of hunting pilot whales still in practice. The village of Layou, located in the watershed area, has a petroglyph park which is a tourism site that

[165] Kacal, A. S. 1994. Buccament Valley, St. Vincent, Its people and natural resources. Opportunities for community participation in development. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Marine Resources and Environmental Management. UWI.

[166] Van der Meerin, 1999. *OECS-NRMU Buccament Valley project files.* Retrieved from: nationalparks.gov.vc/nationalparks/index.php/.../2-environmental-reports?...1999

employs some if its residents. Layou is considered one of the economically and socially vulnerable communities in St Vincent for its high unemployment levels.

Social Aspects

According to Kocks (2008), the Social and Community infrastructure of the area of Yambou River Watershed comprises of two (2) primary schools; at Stubbs and Peruvian Vale. There is also the presence of a police station as well as a sports facility, both at Stubbs. There is a Roman Catholic, Methodist and Day and Seven Day Adventist Church at Stubbs, with a solitary Roman Catholic Church at Argyle.

It should be noted that with regards to utilities; fire-fighting services do not exist in the area; however, fire hydrants have been integrated into the recently upgraded Windward Highway e.g. at Stubbs, Brighton and Biabou and other villages along the Windward Highway. There is one official landfill site in the area that serves the nearby communities, located in Diamond. Collection of household garbage takes place at least once a week.

The Ministry of Health (MoH) is the main provider of health care. Health care is provided through the Milton Cato Memorial Hospital (the main referral hospital), the five district hospitals and thirty-nine Health Centres throughout SVG. The range of services includes primary and secondary care. Mental health services are provided through the Mental Health Centre. Family planning, nutrition education and health education are also provided by the health centres and the main hospital. The health care facilities within and close to the study area are the clinics at Biabou, Stubbs and Calder (out-patient facilities) and a hospital at Mespo.

Apart from high unemployment levels in Buccament, the main constraint on the communities (New Peniston, Hope, Dubois, Vermont, Retreat, Francios, Greenhill, Fiddlepiece and Queensbury) is low educational levels. An average 8 children out of some 50 candidates pass the entrance exam to secondary school from the Dubois School and none from Buccament[167]. Education to the age of 16 is not yet mandated by law, and many students drop out of the school system for various reasons[168]. Anecdotal information suggests that the drop out rate for boys is higher than girls. Many of the early male school leavers find employment in the agricultural sector including the cultivation of the illegal crop marijuana and in other informal sectors. There is also high male involvement in the informal illegal activity including the drug trade after having no place in the secondary system.[169] Employment opportunities are limited in the Buccament area and there is a lack of opportunities for persons without formal educational qualifications. Technically skilled employment and apprenticeships are difficult to obtain leaving the majority of the residents in the valley to rely on subsistence agriculture and minimal construction work (mainly the building of houses in the community).

The Kingston Watershed area; which contains the most densely populated area on the island, the capital city of Kingstown utilizes the majority of the country's social and natural resources. Kingstown, the capital city has a number of educational centers due to its dense and relatively young population; with approximately 34 playschools and pre-schools, 8 primary schools and 7 secondary, tertiary and higher learning institutions which are government and privately owned.[170] The Ministry of Health, Wellness, and the Environment is the main provider of primary and secondary health care services. Primary health care is offered through 39 health centers in the country's nine health districts, seven on the island of Saint Vincent and two in the Grenadines[171]. Secondary care provided at the 211-bed Milton Cato Memorial Hospital, the country's only government-run, secondary-care referral institution. The

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[167] OECS NRMU 1999. *Lessons Learned Case Study of Buccament Valley Natural Resource Integrated Management Project.* Retrieved from: nationalparks.gov.vc/.../projects/.../2-environmental-reports?...oecs-buccament-valley...1...

[168] OECS NRMU 1999.

[169] UNICEF 2017. *Situational Analysis of Children in Saint Vincent and the Grenadines.* Retrieved from https://www.unicef.org/easterncaribbean/ECAO_SVG_Sitan_2017.pdf

[170] St. Vincent and the Grenadines. *Educational Statistical Digest* 2017. Retrieved from: http://stats.gov.vc/LinkClick.aspx?fileticket=LtFp-DII6KA%3D&tabid=60

[171] Pan American Health Organization 2012; *Health in the Americas, 2012 Edition: Country Volume*. Retrieved from: https://www.paho.org/salud-en-las-americas-2012/index.php?option=com_docman&view=download&alias=147-saint-vincent-grenadines-147&category_slug=hia-2012-country-chapters-22&Itemid=231&lang=en

Maryfield Hospital in Kingstown, with 12 beds, is privately owned and operated, the Government operates a 106-bed geriatric facility for the indigent. Five private institutions with a combined bed capacity of 55 offer resident also provide care for the elderly[172]

The areas in the Kingstown watershed has seen a shift from agriculture being the predominant economic activity and employer to services (mirroring the changes in the national economy). The changing economic structure has resulted in a shift in resource use. Tourism, the main service economic activity is natural resource consumption intensive resulting in the conversion of agricultural lands to housing and hotels. Tourism activities also utilize more water resources and issues in the dry and drought periods, electricity and the disposal of raw sewerage in marine areas.[173] There have been land use conflicts associated with the changing economic activity. The major shift in the employment trends from agriculture to tourism has seen the increased use of resources needed to maintain these industries which creates a strain on water resources, electricity and natural resources, a limitation that can be seen having its effects on other sectors[174].

Land Use

The Yambou River Watershed is characterized by a number of dispersed rural settlements. Land use within the area can be classified as agricultural, residential and to a lesser extent commercial. According to Kocks (2008), approximately 73% of small holdings (less than 25 acres) occupy approximately 19% of the total farmland, while approximately 1% of large holdings (more than 25 acres) account for almost 26% of the farmland[175]. About 11% of the holdings (5 to 25 acres) occupy approximately 35% of the total farmland. In the first half of the 19th century, until the 1970s, the area surrounding the Yambou River Watershed was owned by one landowner and was known as the Argyle Estate. This estate was also the main local employer during that time. The types of crops grown on the estate changed over time; initially the main crop was sugar cane, followed by bananas and more recently by peanuts and arrowroot.

Presently, agriculture continues to be the predominant land use and one of the main livelihoods in the area. An estimated 61 % of the area is used for agricultural purposes, 55% of which is pasture. Main crops of the area are peanuts, banana, root crops, corn, dasheen, chive and cauliflower. In addition, egg-plant, hot pepper, pigeon peas, cucumbers and lettuce are produced [176].

Most of the agricultural land of the areas surrounding the river basin is farmed under leasing contracts[177]. Majority, if not all of the farms in the watershed, are classified as small holdings. Twenty percent (20%) of areas around the study area is presently under cultivation, whilst a further twenty-four percent (24%) is utilized for pasture grounds for cows, sheep, goats etc. About five percent (5%) of the land area is planted with permanent crops[178].The practice of crop sharing active among the villages; where owners who lived far away (e.g. Caaliaqua, Belair) share the revenue from the sale of their animals with those persons that take care of them. The region has a total of 762 registered male farmers and 381 registered female farmers, implying twice as many male farmers than female farmers. The average size of land for the registered farmers in this watershed region is approximately 2 acres, which is used to grow mainly eddoes, sweet potatoes, breadfruit and coconut [179].

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[172] Pan American Health Organization 2012; *Health in the Americas, 2012 Edition: Country Volume.* Retrieved from: https://www.paho.org/salud-en-las-americas-2012/index.php?option=com_docman&view=download&alias=147-saint-vincent-grenadines-147&category_slug=hia-2012-country-chapters-22&Itemid=231&lang=en

[173] Kocks 2008. *Government of Saint Vincent and the Grenadines; International Airport Development Company; Argyle International Airport Project Environmental Impact Assessment*. Retrieved from: https://www.scribd.com/document/4042274/FinalReport-05-08

[174] Food and Agricultural Organization 2011. *Country Programme Framework (CPF) 2012 – 2015 For St. Vincent and the Grenadines Agricultural Sector.* Retrieved from: http://www.fao.org/3/a-bp528e.pdf.

[175] Kocks 2008.

[176] Food and Agricultural Organisation 2011. *Country Programme Framework (CPF) 2012 – 2015 For St. Vincent and the Grenadines Agricultural Sector.* Retrieved from: http://www.fao.org/3/a-bp528e.pdf.

[177] Kocks 2008.

[178] Ibid.

[179] Ministry of Agriculture 2018. *Agriculture Planning Unit.*

According to the Agriculture Planning Unit, SVG (2018), the areas surrounding the Yambou River Basin comprises of approximately 762 male farmers and 381 female farmers. The main crops grown here are Dasheen, sweet potatoes and eddoes. Women and men plant similar crops and the average size of the farms for males is 3.1 acres and for females 2.4. However, most of the lands under production by women are not owned by the women or in their name although they have claims by virtue of marriage or will. The lack of legal land tenure by women makes it difficult for the women to be independent in their operations and is a handicap in accessing credit[180]. Livestock farmers reside mainly in the immediate communities, e.g. at Argyle, Victoria village, Mt. Pleasant, Calder or Peruvian Vale. In the communities with cattle rearing there is also farming activity with a gender breakdown of 70 percent male and 30 percent female farmers[181]. Cattle rearing communities are characterized by elderly persons (approximately 60 to 77 years old). Cattle farmers restricted by the lack of transportation utilize nearby pastures which are available at no cost. The area in earlier decades boasted larger numbers of cattle farmers, ranging between 400 and 500 heads, but have seen decline in the activity in the last 20 years. The Department of Lands and Surveys indicated that the cattle rearing areas in the r watershed communities is the second most important livestock area of mainland St. Vincent, with numbers of 70 to 80 pastures in the area and adjacent areas[182].

Buccament is roughly trapezoidal in shape, being narrowest at the coast and widest, approximately one mile across, in the central range. The Buccament River transects the valley. It is both a source and a sink for a number of activities. The upper area of the valley is a forest reserve and a critical watershed. This watershed provides a large percentage of the nation's potable water and is the main source of drinking water for capital city Kingstown. Land ownership is divided between private residential small holdings and estate land.

According to the survey of land and property conducted by Brown & Co for the IADC (2008), a total of 131 home owners are in the Buccament Watershed and has been increasing for the past 20 years[183]. 15-20% of the basin is designated for residential land use; comprising of households with enclosed yards and gardens. The increase in housing in the watershed have resulted in houses being built in flood zones making residents particularly vulnerable to floods and its impacts on property and lives. The houses on the river basin was particularly affected by the Christmas Floods of 2014 which resulted in 4684 persons or 28 percent of the impacted in the Vermont Valley all the way to the Buccament Bay area[184]. The watershed has two basic agricultural zones with registered farmers numbering 460 males and 245 females. The main crops of eddoes, lettuce, cabbage, corn and peppers are grown on farm lands that are of an average size of two acres. The main tree crops of the area include breadfruit, mango, cocoa farm, mango and nutmeg.

The Kingstown watershed has the largest agricultural holdings with four agricultural districts encompassing a total 1067 registered male farmers and 457 female farmers, representing a high percentage of males in the agriculture sector and mirroring the situation nationally and in the other watersheds. The watershed area has predominantly supplied the country with the majority of sweet potatoes, supplemented by ginger and eddoes. The main tree crops located in this area are bread-fruit and golden apples. The data on agricultural holdings of the watershed in 2018 indicates that 76% of the young male population (age 18-35) take part in subsistence agriculture of eddoes, dasheen and sweet potatoes cultivation[185]. [186]The data did not indicate whether faming this was their main economic activity as it contradicts other figures that suggests that there is an ageing of farmers on the islands[187]. In addition, many young farmers who engage in illegal crop cultivation are also involved in subsistence agriculture. The engagement of young males in the agriculture, even in the cultivation of illegal crops, suggests that if farming is economical and can provide persons with a satisfactory income that they will be interested. This offers a point of entry for training

[180] Network of Rural Women Producers, 2018. Interview
[181] Ministry of Agriculture 2018.
[182] Kocks 2008.
[183] Ibid
[184] GFDRR: Rapid Damage and Loss Assessment (DALA) December 24-25 2013 Floods (2014). *A report by the Government of Saint Vincent and the Grenadines.* Retrieved from https://www.gfdrr.org/sites/default/files/St%20Vincent%20rapid%20assmnt%202014%20floods.pdf
[185] Ministry of Agriculture 2018. Agriculture Planning Unit,
[186] The ageing of rural populations: evidence on older farmers in lower and middle-income families 2014. Retrieved from: http://www.helpage.org/silo/files/the-ageing-of-rural-populations-evidence-on-older-farmers-in-low-and-middleincome-countries.pdf
[187] Ibid.

and attracting young persons to climate-smart agricultural practices and alternative livelihoods. In terms of market for the products the major buyers are local supermarkets, hotels and restaurant chains, smaller scale huckster who resell to other Caribbean islands, one major agro-processor and individuals who export to the UK mainly by containers. Local restaurants and supermarkets report buying the majority of their produce from local producer and imports when not available locally. However, the now closed Buccament Bay 5 start resort reported importing 90 percent of their produce.[188] The statistics for livestock farms in the watershed also indicates a male over-abundance with males owning most of cattle lands (74%) and females (26%)[189]. The size of the farms also shows a large disparity in distribution with 81% of males owning farms more than 5 acres in size, compared to the 19% of females[190].

Target Landscape Profile: Leeward Coast Marine Park (Proposed)

Environmental

The Leeward Coast Marine Park (proposed) site is an 2183 ha nearshore marine area that extends from x point to x point (northern boundary) – over 2/3 of the leeward coastline - and extends 800 meter offshore to meet CCI nearshore criteria of up to x depth for inclusion in target marine sites for protection. At the northern boundary, and within the proposed Marine Park is the 7 ha Chateaubelair Islet legally protected as a nesting site for seabird conservation. The southern extends to the northern edge of the Kingstown Bay, from which coastal population density diminishes northward along the coast.

Though no site-specific survey of the Leeward Coast coral framework is detailed, bathometric studies have identified the seafloor base of St Vincent, with the majority of coral assemblages for St Vincent proper are found along the length of the Leeward Coast. Coral framework and dense seagrass line the Buccament Bay, followed by hard ground and turf. 2015 National Reef Health Index indicated IUCN indicated 11 Red-listed species of coral (excluding Least Concern /LC listed species). Rugose coral framework (or stony corals) are found in St Vincent, primarily with sparse (<30% total) live coral cover. Live coral colonies range from sub-meter to meter-scale in size. Presence of St Vincent's Scleractinia live coral cover is typically low (<10%)[191], and accounts for all of SVG's IUCN listed species[192]: Staghorn Coral *Acropora cervicornis* (CR), Elkhorn Coral *Acropora palmata* (CR): Lamarck's Sheet Coral *Agaricia lamarcki* (EN), Pillar Coral *Dendrogyra cylindrus* (EN): and 3 additional VU species Rough Cactus Coral *Mycetophyllia ferox,* Large Ivory Coral *Oculina varicose* and Blue Crust Coral *Porites branneri.* The sole NT species is Elliptical Star Coral *Dichocoenia stokesii.* Calcareous algae and fleshy algae (*Sargassum*, *Dictyota* spp.), along with gorgonians, dominate the remainder of the open substrate (up to 20% space cover). Sand formations are primarily unconsolidated sediment sheets with <20% seagrass or macroalgal cover. Dense meadows of seagrass are interspersed with macroalgae (>60% space cover). Community is dominated by *Thallassia testudinum* but other seagrasses (principally *Syrongodium filiforme*) and macroalgae (*Halimeda* sp.) are admixed at various densities[193], found almost exclusively along the southern and lee coast (2015)[194,195]. Reef framework and planation hardgrounds with a dominant cover of gorgonians (>60%) by various species of gorgonians.

[188] Arnold Babwah & Associates 2016, Market Study for Fresh Produce St. Lucia, Grenada, Dominica and St. Vincent and the Grenadines
[189] Kocks 2008.
[190] Ministry of Agriculture 2018, Agriculture Planning Unit.
[191] The Nature Conservancy (TNC) 2015. Summary Report of the Satellite mapping of Benthic Habitats and Bathymetry for St Vincent and the Grenadines.
[192] IUCN 2018
[193] TNC 2015
[194] SVG Coral Reef Report Card. 2016.
[195] http://www.caribnode.org/maps. St Vincent. Accessed 8 June 2018.

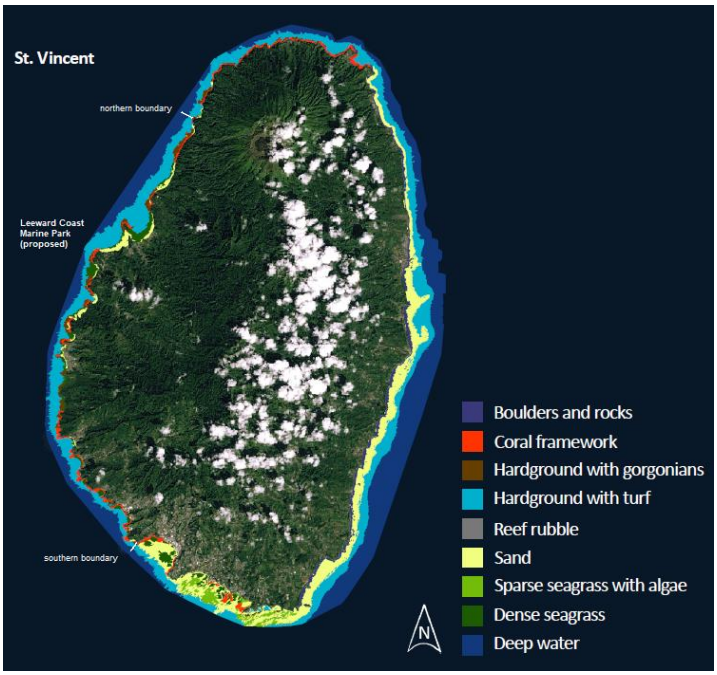

Figure 4. Marine Habitat Map. St Vincent[196].

One CR species of shark, Smalltooth Sawfish *Pristis pectinate* is document for St Vincent and the Grenadines, with 3 EN (Whale Shark *Rhincodon typus,* Scalloped Hammerhead *Sphyrna lewini* and Hammerhead Shark *Sphyrna mokarran*), abd an additional 3 VU species The Sperm Whale *Physeter macrocephalus and the* West Indian Manatee *Trichechus manatus* are both listed as Vulnerable. The Sperm Whale is still hunted in SVG. There are also 2 CR listed fish (Atlantic Goliath Grouper Epinephelus itajara, Warsaw Grouper Hyporthodus nigritus) as well as 3 EN species and 18 VU species which consist primarily of reef fish and found in the nearshore areas. The coral framework in Saint Vincent and the Grenadines is rugose, with sparse (<30% total) live coral cover. Live coral colonies range from sub-meter to meter-scale in size. Coral communities dominated by *Siderastrea, Faviidae, Monastrea, Diploria*, and *Colpophylia* spp. Calcareous algae and fleshy algae (*Sargassum, Dictyota* spp.), along with gorgonians, dominate the remainder of the open substrate (up to 20% space cover)[197] .

Socio-economic & Demographic

The Leeward Managed Area ass a geographical unit encompasses the Leeward coast of the island. The area is therefore made up of a number of villages and communities, some of which are also located in other landscapes. The most notable villages and communities are described. Generally, the area is less developed that the Windward cost of the island where the majority of the islands hotels and guesthouses are located. The Leeward coast's main activity is primarily agriculture and fishing. The infrastructure of the area consists of a main highway, the Leeward Highway with feeder roads into villages and farms. The highway was refurbished in 2010 after years in a state of disrepair. The refurbishment of the highway made it easier for residents of the Leeward communities to get to Kingstown and assisted in relief and evacuations during incidents of disasters. *The villages of the communities are vulnerable to flooding and were severely impacted by the Christmas Floods in 2013.*

The main villages of the areas are as follows:
Layou with an area of 11.1 sq. miles and is located north of Buccament. Layou has a population of 6,339 (5.8 percent of the total population of SVG), according to the 2012 Census. The sex ratio of the area was 1.07, with 3,275 males and 3,060 females. The community of Bottom Questelles; a small beach and fishing community found in the parish

[196] TNC 2015
[197] Ibid

of St. Andrew. According to the 2012 Census, Questelles has a population of 1,163; 571 males and 592 females and is located in the Parish of Saint Andrew. Barrouallie, also known as the whaling village, is approximately 12 km North-West of Kingstown. It is the largest city and the capital of the parish. The town is shaped into a hole whereby it is protected by the lofty mountain peaks of Pierre, Jacques Hughes Hill and Zion (local name) from volcanic eruptions.

Statistics from the recent Population and Housing Census of 2012 show that the Layou district in which Buccament Valley is situated have seen little to no demographic change in areas surrounding the Buccament Watershed. They have a higher ratio of males over females in the under 15 and under 30 age group, and that the population is young. Almost half of the population in Buccament Valley is under 15 years. This indicates a high future demand for housing, land and jobs, and an urgent need to cope with diversification of agriculture, training and job opportunities. According to the Census (2012), the population of Buccament Valley numbers persons is approximately 2800 (approximately 1390 males and 1410 females).

The economy of the villages of the Leeward area supported mainly by agricultural and fishing activities with some tourism activities. The Vermont Valley in the centre of Buccament is home to one of the country's prime eco-tourism sites, the Vermont Nature Trail and has a thriving agricultural community of over 200 registered farmers and over 400 agricultural plots, which produce a wide variety of vegetables and root crops. The community livelihood is embedded in subsistence and commercial farming, of crops including cassava, peas, sorrel and sweet potatoes. The small village of Bottom Questelles employs majority of its residents in its small fishing industry as well as recreational industry, given the popularity of its beach. The community of Barrouaille in the Kingstown Watershed is mainly engaged in agriculture and fishing, with the tradition of hunting pilot whales still in practice. The village of Layou, located in the watershed area, has a petroglyph park which is a tourism site that employs some if its residents. Layou is considered one of the economically and socially vulnerable communities in St Vincent for its high unemployment levels.

The Ministry of Health (MoHE) is the main provider of health care. This care is provided through the Milton Cato Memorial Hospital (the main referral hospital), the five district hospitals and thirty-nine Health Centres throughout SVG. The range of services in-ludes programmes of primary, secondary and tertiary care. The area is also served by several pre-schools, primary school and three secondary schools. Primary and secondary schools are government owned and pre-schools tend to be primarily privately owned. Many students also travel to Kinsgtown to attend high school as well as the technical college.

Land Use

Buccament Bay forms the sheltered seaward boundary of the valley, which stretches up to mountain forest reserve areas above Vermont. Buccament is roughly trapezoidal in shape, being narrowest at the coast and widest, approximately one mile across, in the central range. The Buccament River transects the valley. It is both a source and a sink for a number of activities. The upper area of the valley is a forest reserve and a critical watershed. This watershed provides a large percentage of the nation's potable water and is the main source of drinking water for capital city Kingstown. Land ownership is divided between private residential small holdings and estate land.

According to the survey of land and property conducted by Brown & Co for the IADC (2008), a total of 131 home owners are in the Buccament River Watershed a number which has been on the increase for the last 10 to 20 years. Furthermore, 15-20% of the basin is designated for residential land use; comprising of households with enclosed yards and gardens. The area has seen two basic agricultural zones with registered farmers numbering 460 males and 245 females. The main crops of eddoes, lettuce, cabbage, corn and peppers are grown on farm lands that of an average size of two acres. The main tree crops of the area include breadfruit, mango, cocoa farm, mango and nutmeg.

This area has predominantly supplied the country with the majority of sweet potatoes, supplemented by ginger and eddoes. The main tree crops located in this area are bread-fruit and golden apples. The agricultural holdings of this particular region show that 76% of its young male population (age 18-35) take part in subsistence agriculture of eddoes, dasheen and sweet potatoes cultivation. There is also similar statistics for livestock farms in the watershed

region with predominantly males owning cattle lands (74%) and females (26%). The size of the farms also shows a large disparity in distribution with 81% of males owning farms more than 5 acres in size, compared to the 19% of females[198]

Target Landscape Profile: Chatham Bay

Environmental

Union Island supports a remarkably rich and diverse wildlife, considering its relatively small size and dry climate. The "old forest of Union" is characterized by well-developed secondary deciduous forest, which remain healthy given the limited rainfall / dry island. Union Island has 14 species of terrestrial reptiles (but no amphibians), important nesting beaches for hawksbill and leatherback turtles, and a rich diversity of birds, but there are no native maMarine Parkls apart from bats. Union Island is noted for having most mangroves found in Saint Vincent & the Grenadines[199]. In common with all Grenadine islands, Union is relatively dry and prone to severe droughts. There are no permanent streams or freshwater ponds on the island, and water is dependent upon desalinization plants or water shipment from mainland St Vincent.

Chatham Bay is on western side of Union Island (Figure x), whose forest are among the most species-rich in the Grenadines despite the small size of the island[200]. Trees include at least 63 species including regional endemics, e.g. *Capparis odoratissima, Trichilia hirta* and *Coccoloba coronaria*. Trees of heights above 20 m are found at Water Rock Reserve, adjacent to Chatham Bay (Figure x, below), and include *Pisonia fragrans, Bursera simaruba, Albizia caribaea* and *Spondias mombin.* Small remnants of the original climax forest can also be found at the contour line of approx. 400ft[201].

The CR Union Island Gecko *Gonatodes daudini* is currently known only from the slopes above Chatham Bay on Union Island[202,203]. Animals have been found at elevations up to 300 m[204]. Geckos have been recorded close to sea level but are most abundant at higher elevations. The extent of occurrence on Union Island is approximately 1 km², the area of Chatham Bay. The area of occupancy, based on the amount of suitable habitat considered capable of supporting this species on the island, is 0.523 km² [205]. The apparently restricted range suggests that the survival of the population is intimately tied to the presence of mature dry upland forest[206].

198 Agriculture Planning Unit, SVG. 2018.

199 Daltry, J.C., Adams, R., Gaymes, G., Providence, F. & Sweeney, R. 2016. *Union Island Gecko: Conservation Action Plan, 2016–2021.* Report to the Saint Vincent & the Grenadines Forestry Department, Fauna & Flora International and Virginia Zoo.

200 Powell, R. & Henderson, R.W. 2011. *Gonatodes daudini* (errata version published in 2017). The IUCN Red List of Threatened Species 2011: e.T194258A115333400. http://dx.doi.org/10.2305/IUCN.UK.2011-2.RLTS.T194258A8889057.en. Downloaded on **26 June 2018**.

201 Daltry et al. 2016

202 Powell, R. AND R. W. Henderson. 2005. A New Species of *Gonatodes* (Squamata: Gekkonidae) from the West Indies *Caribbean Journal of Science,* Vol. 41, No. 4, 709-715.

203 Daudin, J. & de Silva, M. 2007. An annotated checklist of the amphibians and terrestrial reptiles of the Grenadines with notes on their local natural history and conservation. *Applied Herpetology*, 4, 163-175.

204 Bentz, E.J., Rivera Rodríguez, M.J., John, R.R., Henderson, R.W. & Powell, R. 2011. Population densities, activity, microhabitats, and thermal biology of a unique crevice and litter-dwelling assemblage of reptiles on Union Island, Saint Vincent and the Grenadines. *Herpetological Conservation and Biology,* 6, 40-50.

205 Powell and Henderson 2011

206 Powell and Henderson 2005

Figure 5. Chatham Bay: Known habitat of the *Gonatodes daudini.* [207]

Socio-economic

Chatham Bay is located on Union island in the Grenadines. Clifton and Ashton are the two principal towns, of Union Island from which they are numerous smaller bays and cays; inclusive of Chatham Bay. The island is home to approximately 3,000 residents; comprising of approximately 1800 males and 1200 females, with a fairly paltry young population [208]. The area has an international airport that has domestic flights to Saint Vincent and some of the Grenadines and international flights to Barbados, Carriacou, Grenada and Martinique, given its popularity with yacht and biodiversity tourism.

The tourism industry plays an important role in Union Islands' economy. A large number of yachts visit the island each year, often on their way to the nearby Tobago Cays. There are a number of local guest houses and hotels. There are several hotels and guest houses on Union Island, as well as schools, churches and a small health clinic. The yacht services business and tourist day-chartering business provides livelihoods for local residents. Other livelihoods include a boutiques and supermarkets, bars and restaurants, internet cafes and dive operators. The Chatham Bay is popular with academics and researcher for its biological diversity, particularly, the high numbers of endangered and endemic reptiles.

[207] Daltry et al. 2016
[208] St. Vincent and the Grenadines. Population and Housing Census 2012.

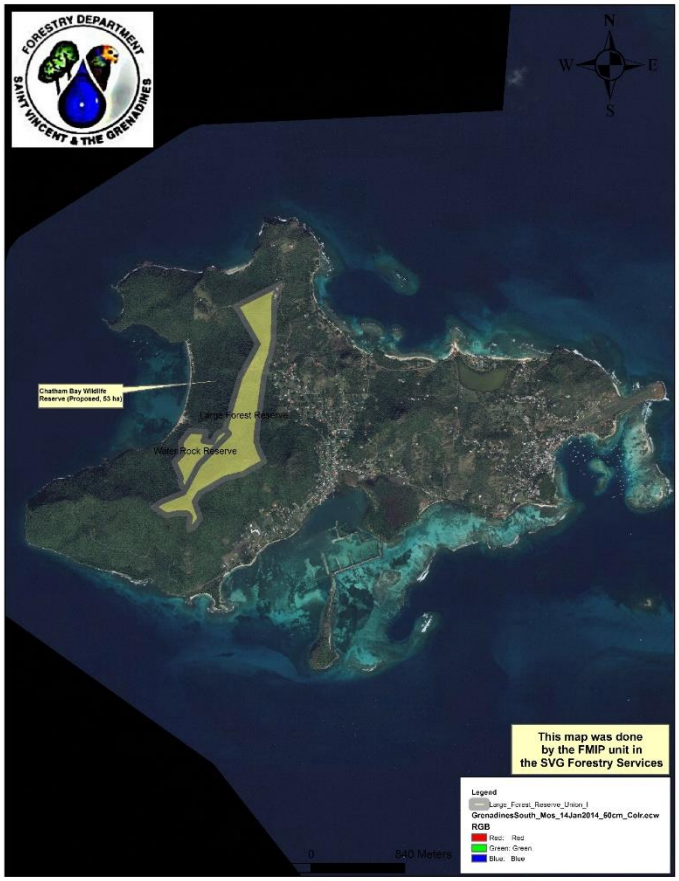

Figure 6. Chatham Bay and surrounding Forest Reserves

In addition to tourism, there is some small-scale subsistence agriculture livelihoods in the community, including the production of root vegetables such as eddoes, dasheen, sweet potatoes. Some vegetables are also grown by the local producers. Utilizing its seascape, fishing is also an economic activity of some residents. However, fishing as the main economic activity for residents is on the decline. There is a fishermen's cooperative with approximately 20 members. The fishing cooperative has seen a reduction in members and even present members do not identify fishing as their secondary productive activity[209]. Mostly males are involved in the industry in the catching of fish. Women are involved in the value chain in the selling of fish both in the markets, raw and in the selling of cooked fish in the various local restaurants and food stalls. The women of the area are involved mainly in thein retail (small shops) and other services associated with the hospitality industry. Both women and men have expressed high interest in alternative livelihoods opportunities including the fishing and marketing of the invasive Lionfish.[210]

Turtle watching is conducted by the Union Island Environmental Attackers (UIEA), a local environmental NGO that works to preserve the environment on Union Island. Turtle Watching is done during the Turtle Closed Season, which runs from March 1 to July 31 annually. The Union Island Sailing Club sponsors two sailing dinghies that participate in local regatta. The Club is trying to help residents of Union rediscover the sailing skills of earlier generations. In recent years Union Island's tourism industry has suffered from a spate of crime against tourists and scam artists. The island benefits from a tight-knit community, now extinct in other parts of the Caribbean and crimes tend to be petty larceny mainly.

[209] Ramessar, C. 2017. Pers. Obs.
[210] Ibid.

Table 2. IUCN Red Listed Species (Critically Endangered/CR, Endangered/E, Vulnerable/VU & Near Threatened/NT)[211]

GENUS	SPECIES	COMMON NAMES (ENG)	RED LIST STATUS
BIRDS			
Catharopeza	*bishopi*	Whistling Warbler	EN
Calidris	*canutus*	Red Knot, Knot, Lesser Knot	NT
Calidris	*pusilla*	Semipalmated Sandpiper	NT
Calidris	*subruficollis*	Buff-breasted Sandpiper	NT
Egretta	*rufescens*	Reddish Egret	NT
Amazona	*guildingii*	Vincent Parro	VU
Hydrobates	*leucorhous*	Leach's Storm-petrel	VU
MAMARINE PARKLS			
Oligoryzomys	*victus*	St. Vincent Pygmy Rice Rat, St Vincent Pygmy Rice Rat	EX
Physeter	*macrocephalus*	Sperm Whale, Cachelot, Pot Whale, Spermacet Whale	VU
Trichechus	*manatus*	American Manatee, West Indian Manatee	VU
REPTILES & AMPHIBIANS			
Chironius	*vincenti*	St Vincent Blacksnake	CR
Gonatodes	*daudini*	Grenadines Clawed Gecko, Union Island Gecko	CR
Amerotyphlops	*tasymicris*	Grenada Bank Blindsnake, Grenada Worm Snake	EN
Chelonia	*mydas*	Green Turtle	EN
Pristimantis	*shrevei*		EN
Caretta	*caretta*	Loggerhead Turtle	VU
Dermochelys	*coriacea*	Leatherback Turtle	VU
Marisora	*aurulae*	Lesser Windward Skink	VU
Sphaerodactylus	*kirbyi*	Grenadines Sphaero, Bequia Dwarf Gecko, Bequia Sphaero	VU
PLANTS			
Guaiacum	*officinale*	Commoner Lignum Vitae, Guaiac Tree	EN
Swietenia	*mahagoni*	West Indian Mahogany	EN
Magnolia	*dodecapetala*		VU
Picrasma	*excelsa*		VU
Pouteria	*semecarpifolia*		VU
Melocactus	*broadwayi*	Turk's Cap	NT
Opuntia	*triacantha*	Big Pine Key Prickly-pear	NT
CORAL			
Acropora	*cervicornis*	Staghorn Coral	CR
Acropora	*palmata*	Elkhorn Coral	CR
Agaricia	*lamarcki*	Lamarck's Sheet Coral	EN
Dendrogyra	*cylindrus*	Pillar Coral	EN
Montastraea	*annularis*	Boulder Star Coral	VU
Montastraea	*faveolata*		VU
Montastraea	*franksi*		VU
Mycetophyllia	*ferox*	Rough Cactus Coral	VU
Oculina	*varicosa*	Large Ivory Coral	VU
Porites	*branneri*	Blue Crust Coral	VU
Dichocoenia	*stokesii*	Elliptical Star Coral	NT
SHARKS			
Pristis	*pectinata*	Smalltooth Sawfish, Wide Sawfish	CR
Rhincodon	*typus*	Whale Shark	EN
Sphyrna	*lewini*	Scalloped Hammerhead	EN
Sphyrna	*mokarran*	Great Hammerhead, Hammerhead Shark Shark	EN
Carcharhinus	*falciformis*	Silky Shark	VU
Carcharhinus	*longimanus*	Oceanic Whitetip Shark	VU
Isurus	*oxyrinchus*	Shortfin Mako	VU
Aetobatus	*narinari*	Spotted Eagle Ray, Bonnetray, Maylan	NT

[211] IUCN 2018

Carcharhinus	*acronotus*	Blacknose Shark	NT
Carcharhinus	*perezi*	Caribbean Reef Shark	NT
Galeocerdo	*cuvier*	Tiger Shark	NT
Negaprion	*brevirostris*	Lemon Shark	NT
Prionace	*glauca*	Blue Shark	NT
Pseudobatos	*percellens*	Southern Guitarfish, Chola Guitarfish	NT
FISH			
Epinephelus	*itajara*	Atlantic Goliath Grouper, Goliath Grouper	CR
Hyporthodus	*nigritus*	Warsaw Grouper	CR
Anguilla	*rostrata*	American Eel	EN
Epinephelus	*striatus*	Nassau Grouper	EN
Thunnus	*thynnus*	Atlantic Bluefin Tuna	EN
Balistes	*capriscus*	Gray Triggerfish,	VU
Coryphopterus	*eidolon*	Pallid Goby	VU
Coryphopterus	*lipernes*	Peppermint Goby, Bluenose Goby	VU
Coryphopterus	*personatus*	Masked Goby	VU
Coryphopterus	*thrix*	Bartail Goby	VU
Coryphopterus	*tortugae*	Patch-reef Goby	VU
Elacatinus	*prochilos*	Broadstripe Goby, White-striped goby	VU
Hyporthodus	*flavolimbatus*	Yellowedge Grouper,	VU
Hyporthodus	*niveatus*	Snowy Grouper, Seabass	VU
Kajikia	*albida*	White Marlin, Marlin, Skilligalee	VU
Lachnolaimus	*maximus*	Hogfish	VU
Lutjanus	*cyanopterus*	Cubera Snapper	VU
Makaira	*nigricans*	Blue Marlin	VU
Megalops	*atlanticus*	Tarpon	VU
Mola	*mola*	Ocean Sunfish	VU
Mycteroperca	*interstitialis*	Yellowmouth Grouper	VU
Rhomboplites	*aurorubens*	Vermilion Snapper, Red Snapper	VU
Thunnus	*obesus*	Bigeye Tuna	VU
Albula	*vulpes*	Bonefish	NT
Balistes	*vetula*	Queen Triggerfish, Old Wife, Ol'wife, Triggerfish, Turbot	NT
Dermatolepis	*inermis*	Marbled Grouper	NT
Epinephelus	*morio*	Red Grouper	NT
Hippocampus	*reidi*	Long-snout Seahorse, Slender seahorse, Slender Seahorse	NT
Lutjanus	*analis*	Mutton Snapper	NT
Lutjanus	*synagris*	Lane Snapper	NT
Mycteroperca	*bonaci*	Black Grouper, Rockfish	NT
Mycteroperca	*venenosa*	Yellowfin Grouper	NT
Scarus	*guacamaia*	Rainbow Parrotfis	NT
Thunnus	*alalunga*	Albacore Tuna	NT
Thunnus	*albacares*	Yellowfin Tuna	NT

Additional Socio-economic Information of SVG

Overall Economic Situation

In 2017, the fiscal and economic situation in St. Vincent and the Grenadines have improved from previous years. Real economic growth in 2016 was 2.9 percent, the best growth performance since the global meltdown of 2008. Economic growth in 2016 and 2017 was realized by growth in Tourism, Agriculture, Construction, Transportation, Wholesale and Retail Trade, and Assorted Services[212].

The actual number of employed persons increased between 2001-2017. However, on account of the alterations in the internal composition of the overall population, the percentage of unemployed persons remained basically constant. Significant in this regard was the 30 percent increase in the population 60 years and over and the concomitant increase in the number of these persons employed. The increase in persons above 60 years is a public policy issue of huge importance, particularly in connection with jobs, health, social security, retirement benefits, and citizen security. There are 6,046 more employees and employers on the rolls of the National Insurance Services[213].

Success of the economy hinges upon seasonal variations in agriculture, tourism, and construction activity, as well as remittances. As of 2016-2017, Agriculture, Hunting and Forestry has accounted for approximately 7.1% or 86.3 million dollars (EC$) worth of the GDP with crops contributing to the majority of shares. Banana cultivation has seen a gradual increase throughout the years (from 2012-2015) with a 1.31EC$m net value whereas livestock has been observed to decrease as opposed to the previous years stated. Approximately 25-30% of the labour force is meaningfully employed by this sector.[214] Manufacturing has seen an increase to its net worth in contributing to the GDP, accounting for 4.3% inputs. The electricity and water sector collectively make up 4.1% of the GDP, with the former heavily contributing more towards growth than the latter. Construction again remains to be a critical player in the economy of St. Vincent and the Grenadines, contributing approximately 8.1% towards GDP growth, with the overall industry sector composing 17.4% of the GDP. Contrary to recent years; the Wholesale and Retail trade sector has seen a gradual decrease in its force and subsequent contribution; accounting for only 14.9% of the GDP, highlighting the diversification of skills and possibly the presence of more technical personnel within the work force.

This lower-middle-income country remains vulnerable to natural and external shocks. The economy has shown some signs of recovery due to increased tourist arrivals, increasing from 0.5 to 5.5%[215], falling oil prices and renewed growth in the construction sector. Tourism still continues to play its part as a re-emerging sector with the industry having seen a gradual constant increase in its contribution after a minimal dip in 2012-2013. A 2.2% contribution towards GDP from the Hotels and Restaurants has seen the former having a massive increase from 2014 indicating possible increase in tourists visits to the island. The Transport, Storage and Communications sector has remained fairly constant throughout the years, accounting for 14.2% of the GDP, which bodes well for an island focused on developing and enhancing its tourism sector. Road transport has seen a slight decrease given its trend in the recent years, whilst sea travel has also decreased. Within the island, visitor numbers were down despite the opening of the new airport; AIA. This was partly because room stock declined with the closure of the Buccament Bay Resort. Air travel however, has been on the rise.

Saint Vincent and the Grenadines is home to a small offshore banking sector and continues to fully adopt international regulatory standards. The emerging sector of Financial Intermediation has seen exponential increases in a relatively short amount of time, moving from 7.2 to approximately 7.5% of its contribution towards GDP growth

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212 St. Vincent and the Grenadines Budget Address 2017. Retrieved from: http://www.gov.vc/images/pdf_documents/budget_address_and_econ_review_combine_2017.pdf

213 St. Vincent and the Grenadines Budget Address 2018. Retrieved from: http://www.gov.vc/images/pdf_documents/2018-Budget-Address.pdf

214 Saint Vincent and the Grenadines Economy 2018. *CIA World Fact Book.* Retrieved from: https://theodora.com/wfbcurrent/saint_vincent_and_the_grenadines/saint_vincent_and_the_grenadines_economy.html

215 St. Vincent and the Grenadines Budget Address 2017.

within a year; with Banks & Other Financial Institutions as well as Insurance and pension funding seeing steady growth. The Real Estate, Renting & Business Services sector has been, by far, the biggest and most important contributor towards GDP within the island. 16.3% of the island's GDP is accounted for by this sector with Owner Occupied Dwellings being the critical contributor with a net worth of US$64,6m. Real Estate activities has gradually been on the increase around the island which is a significant part in developing the tourism sector. Computer and related activities however, has been stagnant in terms of growth towards contributing to the overall GDP of the country. This possibly signals the move for enhancement and development of the ICT Sector within the country which can provide crucial auxiliary services towards other sectors and can lead to growth. Generally, the services sector makes up for a combined 75.5% of the GDP and employs approximately 60% of the labour force[216].Public Administration and Public Services has been a reliable contributor towards the island's GDP with 12.3% accounted for by this sector, with Health and Social Work, along with Education all seeing increases within the past years.

Alarmingly however, according to the CDB (2017), although the sectors of St. Vincent has seen gradual increases, the overall growth in real output from the country is reported at 0, with GDP growth for 2017-2018 remaining at 2.5%, which indicates the need for diversification of the economy, possibly opening up new avenues of revenue to stimulate growth. The debt to GDP ratio at the end of 2016-2017 for the island however, has seen a change of -5.3%[217].

The government's ability to invest in social programs and respond to external shocks is constrained by its high public debt burden. As of September 2017, total outstanding public debt stood at $1.685 billion, the equivalent of close to 79.0 percent of GDP, reflecting a negligible increase of 0.2 percent when compared to the figure of $1.681 billion at the end of September, 2016[218]. The total public debt was comprised of domestic debt of $572.6 million and external debt of $1.113 billion. The total domestic debt as of September 2017 fell by 2.2 percent or $12.6 million when compared with the same period in 2016. On the other hand, the external debt registered an increase of $16.6 million or 1.5 percent when compared with the external debt as of September 2016.

As of 2017, the GDP is valued at $815 million, with a per capita of $11,600. The Gross national saving is that of –4.8%, signaling a gradual improvement given recent statistics for 2016 (-5.1) and 2015 (-3.1). The household GDP consumption by end use for 2017 was 87.4%. Government consumption as well as investment in fixed capital were 19.2 and 20.3% respectively. The exports of goods and services healthily consumes 22.3% owing predominantly to their large agricultural base of bananas, eddoes and dasheen (taro) and arrowroot starch[219].

Lack of Socio-economic Community Data

There is limited of socio-economic data and socio-economic assessment and studies for the villages and community in SVG. This deficit of baseline data and information needs to be addressed with some degree of urgency as it impedes the effective development of plans, programmes and projects. The issue can be addressed by the disaggregation of data, especially data on social indicators at the community or village levels. There is at present or soon to be implemented a national Survey of Living Conditions and Household Budgets (SLV-HBS) being administered by the Statistical Office of the Government of St. Vincent and the Grenadines. It is hoped that some of the social indicators will be captured in this survey. However, the social assessment would probably best be captured by the development of village profiles. The Social Development Commission of Jamaica offers an excellent example of the profiling of villages that captures physical, geographical, social and other data which provide information for planners and development actors.

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[216] Saint Vincent and the Grenadines Economy 2018. *CIA World Fact Book.* Retrieved from: https://theodora.com/wfbcurrent/saint_vincent_and_the_grenadines/saint_vincent_and_the_grenadines_economy.html

[217] CDB Annual Report 2017. Retrieved from: https://issuu.com/caribank/docs/cdb_annual_report_2017_final__ncm__

[218] St. Vincent and the Grenadines Budget Address 2018. Retrieved from: http://www.gov.vc/images/pdf_documents/2018-Budget-Address.pdf

[219] Saint Vincent and the Grenadines Economy 2018.

For this project it is suggested that social assessments of the villages of the watersheds and other areas of the project activities are completed as part of the baseline studies. These social assessments should include the collection of both qualitative and quantitative data and be gender responsive.

Potential and Vulnerable Groups

Vulnerable Population

The St. Vincent and the Grenadines Country Poverty Assessments (2007/2008) revealed that 30.2 percent of the population lies below the poverty line; a decrease from 1996's study that recorded 37.5 percent of the population below the poverty line. However, although considerable progress has been made with respect to the reduction of abject poverty, the vulnerability levels remain a great cause for concern, with 18 percent of individuals still being vulnerable or at risk of falling into poverty[220].

The Caribbean Development Bank (2008), reported that St. Vincent and the Grenadines has pursued pro-poor policies that have produced programmes and activities that have benefited the poor significantly. As a result, there has been a reduction in abject poverty and improvements in living conditions. Between 2000 and 2015, SVG' HDI value increased by 7.2 percent – from 0.673 to 0.722. Whereas, between 1990 and 2015 SVG's life expectancy at birth increased by 2.9 years, while mean years of schooling increased by 1.0 year and expected years of schooling increased by 1.3 years.

There are 5 major groups of vulnerable persons in SVG. These are:

1) Women
2) Children
3) Elderly
4) Persons with Disability
5) Young men

Women

Female-headed households constitutes a significant percentage of the poorer households in SVG. According to the last Country Poverty Assessment (2008) there was a high correlation between female-headedness and poorer households. In one of the recognized poorest village in the country, New Sandy Bay a recorded 95.8 percent of the households was headed by females. Women's participation in all sector of the economy is less than men with higher numbers of females in the lowest income segment indicting a gender segmentation in economic participation[221] . Female unemployment is also high in the rural areas (where poverty is higher than in urban areas) where they are less involved in the agricultural chain compared to men, own less farms and is highly involved in the under-developed agro-processing.

Children

UNICEF (2017), identifies poverty as the main problem most affecting children in SVG stating that whilst children make up 33.7% of the total population, they account for 48.2% of the poor. Child poverty is related to the higher numbers of female-headed households. Youth unemployment is also high with a CDB report recording the levels of 25 percent with female youth un-employment being higher than males. The following groups were identified as most vulnerable: children (0–15 years) living in poor female-headed households; adolescent girls and boys (15–19); children in residential care centers; children of migrant families; and children in conflict with the law[222].

Young Men

There is high unemployment among young males. Though female un-employment is higher, male youth unemployment is more visible and is associated with high participation in the illegal informal economy namely

[220] Kairi Consultants 2008
[221] CPA 2008.
[222] Situation Analysis of Children in Saint Vincent and the Grenadines https://www.unicef.org/easterncaribbean/ECAO_SVG_Sitan_2017.pdf

marijuana cultivation and trade and in criminal gang activities. Female high school graduation rates are higher than males and boys are less likely than females to transition from primary to secondary school.

Elderly

Life expectancy in SVG, similar to the rest of the Caribbean, is increasing. In the 2012 census, an estimated 10 of the population was above the age of 65 which represents the elderly population. There are more female elderly persons than males. The elderly in SVG disproportionately suffers from non-communicable diseases. They are also vulnerable to poverty and access to inadequate health care, despite the social assistances offered by the state. The elderly that reside alone are more vulnerable to lack of necessary care and the male elderly are more vulnerable than females [223].

Persons with Disability

Persons with disability are vulnerable to poverty and lack of access to health care. Their disability may affect their ability to attend school or work and even access necessary social services and health care. They are especially vulnerable in times of natural disaster especially if they live alone. The government has several social programmes to assist the disabled in the society.

Geography and Social Vulnerability

The areas with the greatest social vulnerability have been identified as the coastal lowlands and the villages of Sandy Bay, Barrouallie, Kingstown and Layou. Sandy Bay was categorized as such based on it being the area with the lowest levels of development and employment. Barrouallie and Layou, high levels of vulnerability were attributed to the large number of young, retired and or disabled persons in these areas. Barrouallie, and Layou are two of the communities of the Leeward Managed Marine Area.

Community Coping Mechanisms

Residents of the communities of SVG have developed mechanisms both at the community and individual level to become resilient to the prevailing economic and social conditions.

At the community level there are several community development organizations with missions to address social and economic issues in the community, including the creation of livelihoods. These organizations vary from faith-based organizations, to environmental and livelihoods organizations, farmers' groups, women's group, both formal and informal, cooperatives, sports organizations and clubs, and governmental organizations. These organizations contribute to alleviating some of the social ills by aiding from the immediate (meals to elderly citizens, food to vulnerable households, financial assistance to school children for transportation to school), to addressing livelihoods and resource depletion and conservation.

The SVG government has several social initiatives to address poverty and social vulnerability including high national expenditure on education (SVG, 2015). There is a Basic Needs Fund which is an initiative funded by the Caribbean Development Bank to assist poor and socially vulnerable persons and communities. Under the basic needs project, a number of community projects have been implemented including livelihood projects such as rabbit rearing. There are also several initiatives to assist the elderly and disabled. There is a national school feeding program that provides a hot meal for children in socially vulnerable areas.

Remittances play an important part of the coping mechanisms of families and communities. Remittances data are not available by areas or villages but lower income households are especially dependent on remittances from family members who migrate to other Caribbean islands, the Grenadines, United States, Canada or Europe. **St. Vincent and the Grenadines** received US$42M in remittances from its nationals overseas in 2017. Though remittances flow is

[223] Report Achievements and deficiencies in the implementation of the Brasilia Declaration St. Vincent and the Grenadines 1/1/2012 https://www.cepal.org/celade/noticias/paginas/9/46849/SaintVincentGrenadines.pdf

tied to the economic performance of mainly the United States, there has been a steady increase in remittance flow to the island over the last 10 years. Remittance inflow to the island was US$27M in 2008 and increased to USD 32 million in 2013 and US$42M in 2017. Anecdotal information suggests that remittances are used mainly for household consumer goods and services.

Community Social Economic Assets and Capacity

The communities of SVG have some social capital and capacity. The social and economic assets and capacity of the communities are as follows:

1) The rural communities have a long history of agriculture production with a variety of crops including plantation agriculture in the case of banana cultivation. Agricultural land ownership is high among older male farmers. In addition to possessing land and practical knowledge of agricultural production, the farmers also possess some basic and traditional environmental and natural resources management knowledge and are an important stakeholder in natural resources management. Whilst there has been a loss of agricultural land to residential and other land use activities agricultural activity continues to be high. Agriculture production is often beset by issues of lack of market, predial larceny and the aging farmers. Most of the young farmers are engaged in marijuana cultivation and can be persuaded to other forms of agriculture if they are presented with lucrative crops.

2) Most farmers possess their own tools, tree stock and livestock providing some agricultural assets to build upon. Farmers are also in formal groups such as cooperatives and farmers associations and have some experience working collectively. The local environmental and natural resource knowledge is high and there is interest in the protection of the environment though there is a high level of use of synthetic pesticides.

3) The fisherfolk community also have some have some assets that can be capitalized on for community development and livelihood generation. There are established fishing cooperatives with long history of fishing. Most of the fisherfolk own their own equipment and boats.

4) The high levels of rural un-employment offer an important human resource base. The country has a 96 percent literacy rate which means the group is at a minimum literate. The high number of females in the group offers the potential to be trained in various areas in the agricultural value chain especially agro-processing. More importantly this group is desperately seeking employment and would be open to training or acquiring skills in new areas of opportunities including alternative and sustainable livelihood activities.

5) Remittances are an important economic and social asset of the community if channeled in the correct manner. Remittances, though the amounts are small, is often consistent. Remittances can be used to build economic capital and assets. At present it is focused on consumer goods and services. Remittances can also be used as a source of collateral for the poor to secure loans and other financial products from banks and credit unions which can be used to establish micro and small enterprises including natural resource-based enterprises. Members of both the farming and fishing communities can use remittances to secure loans for equipment and other inputs. Jamaica and Mexico have many programs which has capitalized on its diaspora population and remittances to fuel local enterprises and these can be offered as examples for the communities in SVG.

6) SVG, like other Caribbean countries have a large diaspora. This diaspora is an asset for the communities and can be utilized for local community development in several ways. It can serve as a source of technical skills and knowledge that can be tapped into for community projects. Secondly, the diaspora is a source of economic support for many households through remittances. This can be expanded upon and channeled into support of households' economic and livelihood ventures. In some Caribbean islands there is a Diaspora Direct Investment where the diaspora is given the opportunity to invest in businesses and other ventures through several mechanisms including public-private partnerships. The diaspora can also be tapped to support local community projects which they already do but in an ad hoc manner. The numerous diaspora

groups can be twined with local CBOs and NGOs and work towards livelihood activities and other projects. The diaspora is also a target market for niche agricultural produce and products especially products from agro-processing products such as sauces and spices.

ANNEX M. LIST OF PEOPLE CONSULTED DURING PROJECT DEVELOPMENT

First Name	Last Name	Organization	Email Address	Telphone Number
Jeremy	Searles	Fisheries Division	fishdiv@vincysurf.com	1 784 456 2738
Shamanti	Labban	Environmental Health	ehdsvg57@yahoo.com	1 784 456 1991
Madonna	Johnson	VincyKlus Inc.	vincyklus@gmail.com	1 784 451 2234/526 1272
Nisha	Glasglow	VincyKlus Inc.	vincyklus@gmail.com	1 784 451 2235/5261272
Ming Zing	Lee	Taiwan Technical Mission	m.z.lee@icdf.org.tw	1 784 458 7447/531 0367
Zonnia	Shallow	CYEN	daria.shallow@gmail.com	1 784 593 1357
Zinze	Robertson	CWSA	zirobertson@cwsasvg.com	1 784 456 2946
Symantha	George	CWSA	sgeorge@cwsvg.com	1 784 456 2946
Chun-Chun	Huang	Taiwan Technical Mission	c.c.huang@icdf.org.tw	1 784 458 7474/533 6670
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ANNEX N. CAPACITY DEVELOPMENT SCORECARD

Contributing Institutions, Government of Saint Vincent and the Grenadines
Ministry of Agriculture, Rural Transformation, Forestry & Fisheries (Forestry Services, Fisheries Division, Research and Development Division)
Ministry of Tourism - National Parks Rivers and Beaches Authority
Ministry of Housing, Informal Human Settlements, Land and Surveys, and Physical Planning
Ministry of Finance, Economic Planning, Sustainable Development and Information Technology
Central Water and Sewage Authority

Capacity result / Indicator	Indicators	Rating	Score	Comments	Next steps	Contribution to outcome
CR 1: Capacities for Engagement						
Indicator 1: Degree of legitimacy/ mandate of organizations leading in integrated natural resources management	Organizational responsibilities for integrated natural resources management are not clearly defined	0				1.2 (Output 1.2), 2.1 (Outputs 2.1-2.3), 3.2 (Outputs 3.1-3.3)
	Organizational responsibilities for integrated natural resources management are identified	1				
	Authority and legitimacy of all lead organizations responsible for integrated natural resources management are partially recognized by stakeholders	2	2	Need to move towards a greater level of recognition. The agencies are currently working on improving this recognition, though do have certain responsibilities and roles that are partially recognized.	The Project will support revision of the National Parks and Protected Areas System Plan and develop a draft Forestry Policy and will ensure extensive and participatory stakeholder consultation in policy and planning, including site level planning and communication, that will further support the legitimacy and authority of the relevant organization.	
	authority and legitimacy of all lead organizations responsible for integrated natural resources management recognized by stakeholders	3				
Indicator 2: existence of operational	No co-management mechanisms are in place	0				2.1 (Outputs 2.1-2.3), 3.1 & 3.2 (Output 3.1, 3.2)
	Some co-management mechanisms are in place and operational	1				

co-management mechanisms for integrated natural resources management	Some co-management mechanisms are formally established through agreements, MoUs, etc.	2	2	In SVG, co-management mechanisms for INRM have been addressed at the national, watershed and community level. Currently, MoUs are signed with community groups for both watershed and PA management. Past MOUs between government agencies to support multi-departmental management arrangements are no longer in effect, and though National Environmental Advisory Board is Cabinet approved, it is not active.	National level coordination: re-activating National Environmental Advisory Board (NEAB) and creation of relevant sub-committees (i.e. Project supported Technical Advisory Committee). Watershed level: Integrated Watershed Management Plan for the Buccament Watershed will be drafted Community level: Draft MoUs between NPRBA and/or Forestry Services, Fisheries Division and communities in CMFR, Chatham Bay and parts of Leeward Coast. Project level: Technical Advisory Committee on watershed management and interventions, which would replace the functions of the NEAB until it is reactivated and functional.	
	Comprehensive co-management mechanisms are formally established and are operational/ functional	3				
Indicator 3: existence of cooperation with stakeholder groups on integrated natural resources management (such as biodiversity conservation and land degradation reduction)	Identification of stakeholders and their participation/involvement in decision-making is poor	0				2.1 (Outputs 2.1-2.3), 3.1 & 3.2 (Output 3.1)
	Stakeholders are identified, but their participation in decision-making is limited	1	1	Examples of stakeholder group cooperation at the local level include the multi-sectoral management committee for the Cumberland Integrated Watershed Management Plan (LD) and current successful co-management arrangement with a CBO fir the Union Island Gecko Conservation Action Plan (BD).	Buccament Integrated Watershed Management Plan and its governance structure will include coordination mechanism involving government and community stakeholders. Multi-stakeholder committees for the management plans (with participatory planning) for the 3 Project supported PA sites; Community participation in implementing priority components of the Union Island Gecko Conservation Action Plan (BD) will be implemented; and co-management arrangements with Union Island Environmental Attackers (Union Island CBO are strengthened.	
	Stakeholders are identified, and regular consultations mechanisms are established and operational	2				

	Stakeholders are identified, and they actively contribute to established participative decision-making processes	3				
CR 2: Capacities to Generate, Access and Use Information and Knowledge						
Indicator 4: Degree of Stakeholders' awareness of sustainable and integrated natural resources management practices	Stakeholders are not aware of the need for sustainable and integrated natural resources management and possible practices	0				2.1 (Outputs 2.1-2.3), 3.1 & 3.2 (Outputs 3.2, 3.3)
	Stakeholders are aware of the need for sustainable and integrated natural resources management, but not of the possible practices	1	1	Some stakeholders implement sustainable and integrated natural resources management and practices, but knowledge of current practices and related technologies is limited and, when known, lack of financial resources for the necessary supplies and equipment limits its implementation	In the three target watersheds, stakeholders will be engaged to participate and incorporate new sustainable land management, climate smart agriculture and soil conservations practices. The Project will also target cooperatives, using cluster approach. Institutional stakeholders will receive Project supported trainings to support improved practices and their subsequent conveyance to community / producer level stakeholders. Outreach, training and communication strategies will take place to engage stakeholders of the CMFR, Chatham Bay and parts of Leeward Coast, including community engagement based on active local stakeholder participatory processes.	
	Stakeholders are aware of sustainable and integrated natural resources management and the possible practices, but do not know how to participate	2		.		
	Stakeholders are aware of sustainable and integrated natural resources management, and are actively participating in the implementation of relevant practices	3				
Indicator 5: Stakeholders' needs, access and sharing of information for integrated natural resources management and	The integrated natural resources management information needs are not identified, and the information management infrastructure is inadequate	0				Outcome 1.1 (Outputs 1.1, 1.2)
	Some of the integrated natural resources management information needs are identified, and the information management infrastructure is inadequate	1	1	Information is scattered across various institutions, there are no data sharing protocols in place and access to the information by government agencies, private and public	Set up of web based Central Information Management System will be supported, with focus on access to biodiversity, land use and socio-economic related	

practices				stakeholders is limited. National Spatial Data Policy has been developed but not implemented yet.	information, allowing for various types of user access rights. BD, LD and socio-economic information gaps will also be addressed and incorporated into this CIMS, along with monitoring systems and a tracking tool to support decision making.	
	The integrated natural resources management information is partially available and shared among stakeholders, but not for all focal areas and/or information management infrastructure is limited	2				
	Comprehensive integrated natural resources management information is available and shared through an adequate information management infrastructure	3				
Indicator 6: Existence of environmental or integrated natural resources management education programmes	No environmental or integrated natural resources management education programmes are in place	0				1.2 (Output 1.5), 2.1 (Output 2.2, 2.3), 3.1 & 3.2 (Outputs 3.2, 3.3)
	Environmental or integrated natural resources management education programmes are partially developed and partially delivered	1	1	The Ministry of Agriculture has various awareness raising programmes, focusing on forestry, agroforestry and agriculture. The NPRBA has been implementing Reef Guardian School programme and Reef Guardian Farmer programme.	National Biodiversity Interpretation Center will be established. Links will be created with environmental organizations/NGOs (i.e. SCIENCE), youth organizations, environmental clubs and internship programmes of the SVG Community College to disseminate training / education programmes.	
	Environmental or integrated natural resources management education programmes are fully developed but only partially delivered	2				
	Comprehensive environmental or integrated natural resources management education programmes exist and are being delivered	3				
Indicator 7: Extent of the linkage between environmental research/science and policy development	No linkage exists between environmental policy development and science/research strategies and programmes	0				1.2 (Outputs 1.1 & 1.2), 2.2 & 2.3 (Outputs 2.1-2.3), 3.2 (Output 3.2)
	Some research needs for environmental policy development are identified, but are not fully translated into relevant research strategies	1	1	Currently, there are significant information gaps and access to information to inform effective environmental policy. Though some of these	National CIMS set up will make information available for further analysis and for decision making and will integrate	

	and programmes			research needs have been identified, significant gaps remain due to insufficient resources, capacities (including human resources) and finances to fill these information/research gaps and develop and implement the related needed programmes.	monitoring and tracking tools. Data gathering and monitoring programmes will be developed for existing and Project supported data collection to support environmental decision making, such as the development and implementation of a National Soil Conservation Programme with data gathering, analysis and monitoring programmes established to support decision making.	
	Relevant research strategies and programmes for environmental policy development exist, but the research information is not responding fully to the policy research needs	2				
	Relevant research results are available for environmental policy development	3				
Indicator 8: Extent of inclusion/ use of traditional knowledge in environmental decision-making	Traditional knowledge is ignored and not taken into account for relevant participative decision-making processes	0				2.1& 2.2 (Outputs 2.1-2.3), 3.1 (Outputs 3.2, 3.3), 4.1 (Outputs 4.1, 4.2)
	Traditional knowledge is identified and recognized as important, but is not collected and used in relevant participative decision-making processes	1	1	Traditional knowledge exists, but there is no certainty about if the records have been maintained, by whom and where.	The project will archive and distribute traditional knowledge and uses of resource use and traditional conservation techniques and integrate these into the Project's outreach and knowledge management activities.	
	Traditional knowledge is collected, but is not used systematically into relevant participative decision-making processes	2				
	Traditional knowledge is collected, used, and shared for effective participative decision-making processes	3				
CR 3: Capacities for Strategy, Policy and Legislation development						
Indicator 9: Extent of integrated natural resources management planning and strategy development	The integrated natural resources management planning and strategy development processes are not coordinated, and does not produce adequate integrated natural resources management plans and strategies	0				1.2 & 1.3 (Outputs 1.3-1.5)
	The integrated natural resources management planning and strategy development processes do produce adequate	1				

processes	integrated natural resources management plans and strategies, but these are not implemented or used					
	Adequate integrated natural resources management plans and strategies are produced, but are only partially implemented because of funding constraints and/or other problems	2	2	PA site management plans exist (South Coast Marine Protected Area, Kings Hill Forest Reserve, Cumberland Integrated Watershed Management Plan). There are also a National Forestry Programme, National Soil Conservation Programme, National Park and Protected Area System Plan and others but implementation is constrained by capacity and funding.	The Project will support capacity, planning and equipment to further the implementation of plans and programmes, and will also The Project will support the Government's efforts to identify and address financing needs and gaps, support increases in sustainable financing, and its re-investment into PAs.	
	The integrated natural resources management planning and strategy development processes are well coordinated by the lead environmental organizations, and produce the required plans and strategies that are being implemented	3				
Indicator 10: Existence of adequate integrated natural resources management policies and regulatory frameworks supportive to biodiversity conservation and land degradation reduction	The environmental policy and regulatory frameworks are insufficient; they do not provide an enabling environment	0				1.2 (Output 1.2, 1.3)
	Some relevant environmental policies and laws exist but few are implemented and enforced	1	1	There is deficient or non-existent policy and legislation in several areas to be addressed by the project.	The project will support drafting of a forest policy, updating of a PA policy and updating the existing PA System Plan	
	Some adequate environmental policy and legislation frameworks exist but there are problems in implementing and enforcing them	2			.	
	Adequate policy and legislation frameworks are implemented, and provide an adequate enabling environment; a compliance and enforcement mechanism is established and implemented	3				
Indicator 11: adequacy of the information available for integrated natural resources management decision-making	The availability of information for integrated natural resources management decision resources -making is lacking	0				1.1 (Outputs 1.1, 2.2), 2.2 & 2.3 (Outputs 2.1-2.3), 3.2 (Outputs 3.1, 3.2)
	Some information for integrated natural resources management exists, but it is not sufficient to support the decision-making processes	1	1	Accessible data, databases and information systems for integrated natural resources management are lacking with significant information gaps (LD, land use, BD, socio-economics, etc.).	The Project will support the development of a Central Information Management System (CIMS) focused on information related to biodiversity and land use, including socio-economic data, and allowing for various types of user access rights. The Project will support collection of information on BD, land use and land	

					management practices, develop monitoring systems and integrate this into the multi-departmental CIMS that is accessible and supported by strengthened capacities.	
	Relevant integrated natural resources management information is made available to decision-makers, but the process for updating this information is not functioning properly	2			.	
	Political and administrative decision-makers obtain, and use updated information to take integrated natural resources management decisions	3				
CR 4: Capacities for Management and Implementation						
Indicator 12: Existence and mobilization of resources for the implementation of sustainable natural resources management and utilization practices	The organizations managing and utilizing natural resources don't have adequate resources for the implementation of sustainable practices, and the requirements have not been assessed	0				1.3 (Outputs 1.2-1.4), 2.1 (Outputs 2.1-2.3), 3.2 (Outputs 3.1-3.3)
	The resource requirements for the implementation of sustainable practices are known but are not being addressed	1				
	The funding sources for these resource requirements are partially identified, and the resource requirements are partially addressed	2	2	The resource requirements are partially addressed through the National Soil Conservation Programme, National Forestry Programme and National Agroforestry Programme, PA System Plan	The Project will support development of relevant INRM policies and implementation of practices that will serve as a basis for further resource mobilization beyond the GEF funds.	
	Adequate resources are mobilized and available for the functioning of the lead environmental organizations	3				
Indicator 13: Availability of required technical skills and technology transfer for integrated and sustainable natural resources management and	The necessary required skills and technology are not available, and the needs are not identified	0				1.2 (Outputs 1.5), 2.1 (Outputs 2.1-2.3), 3.1 & 3.2 (Outputs 3.1-3.3), 4.1 (Output 4.1)
	The required skills and technology needs are identified, as well as their sources	1	1	Capacity development and training on INRM is very limited, and mostly carried out through projects and partner agency activities	The Project will provide capacity development and training on INRM such as soil conservation techniques, GIS, integrated watershed management, and climate resilience mainstreaming.	

utilization and product transformation	The required skills and technologies are obtained, but their access depends on foreign sources and/or permanent external advisory services	2		.		
	The required skills and technologies are available, and there is a national-based mechanism for updating the required skills and upgrading the technologies	3				
Cr 5: Capacities to monitor and evaluate						
Indicator 14: Adequacy of the project/programme monitoring process	Irregular project monitoring is being done without an adequate monitoring framework, for detailing what and how to monitor the particular project or programme	0				
	An adequate resourced monitoring framework is in place based on the project/ programme results framework, but project monitoring is irregularly conducted	1	1	The projects usually do have a good monitoring system.	The project will support monitoring and evaluation system with baseline and targets based on SMART indicators.	4.2 (Output 4.3)
	Regular participatory monitoring of results is being conducted, but the information is only partially used by the project/programme implementation team	2				
	Monitoring of results is produced timely and accurately, and the information is used by the implementation team to learn and possibly change the course of action	3				
Indicator 15: Adequacy of the project/programme risk mitigation framework	No risk mitigation system has been established for the project/ programme implementation	0				
	A risk mitigation framework has been established based on the project document, but not monitored or updated to influence project management	1		The score is based on what has been common in previous projects and programmes.	A risk mitigation framework will be monitored and evaluated as GEF-6 project M&E and overall risk management, and will be updated by the Project implementation team, as needed.	4.2 (Output 4.3)
	Project risk mitigation actions are being carried out on an ad-hoc basis and/or not related with risk analysis in project document	2				
	A risk mitigation framework has been established based on the project document, regularly used by the project/ programme implementation team, updated when required	3				

Indicator 16: Adequacy of the project/programme evaluation process	No or ineffective evaluations are being conducted, with no adequate evaluation plan or without the necessary resources	0				4.2 (Output 4.3)
	An adequate evaluation plan is in place, but evaluation activities are irregularly conducted	1		The score is based on what has been common in previous projects and programmes, however the evaluations are not always timely	UNDP will contract a Mid-Term Review to evaluate progress and lessons learned and suggest possible changes; and a Terminal Evaluation to consider compliance with targets and lessons learned to benefit new project designs. Both reviews will consider relevance, effectiveness, efficiency, sustainability and impact.	
	Evaluations are being conducted as per an adequate evaluation plan, but the evaluation results are only partially used by the project or programme implementation team	2				
	Effective evaluations are conducted timely and accurately, and are used by the project team, executing agency, UNDP and/or GEF to correct the course of action, if needed, and to learn for further planning	3				

Matrix of the Capacity Development Assessment Scorecard for Protected Area Systems (SuMarine Parkry)			
Strategic Areas of Support	**Institutional**		
	Overall Score	Total possible score	%
CR 1: Capacities for Engagement	5	9	56%
CR 2: Capacities to Generate, Access and Use Information and Knowledge	5	15	33%
CR 3: Capacities for Strategy, Policy and Legislation development	4	9	44%
CR 4: Capacities for Management and Implementation	3	6	50%
CR 5: Capacities to monitor and evaluate	3	9	33%
TOTAL Score and average for %'s	**20**	**48**	**42 %**

ANNEX O. PARALLEL CO-FINANCING SUMMARY

(See letters in separate file)

Co-financing source	Co-financing detail	Co-financing type	Co-financing amount (USD)	Planned Activities / Outputs	Risks	Risk Mitigation Measures
Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour	Moroccan Agency for International Cooperation: Soil Fertility Project	*Grant*	*574,000*	Components1 and 3	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
	GoSVG Fisheries Development Programme (#451305)	*Loan*	*975,412*	Component 2	*Low*	
	GoSVG Reafforestation Programme – Flood Damage 2013 (#451404)	*Loan*	*138,030*	*Components 2 and 3*	*Low*	
	GoSVG Pest Control and Management Programme (#451502)	*Loan*	*143,551*	*Components 2 and 3*	*Low*	
	Forest Enhancement Project (#451701)	*Loan*	*599,971*	*Components 1, 2 and 3*	*Low*	
	GoSVG	*Grant*	*1,326,896*	All project components/outputs	*Low*	
	GoSVG	*In-kind.*	*290,000*	All project components/outputs	*Medium, depending on annual budgeting and effective allocation of funds to the institution*	
Ministry of Finance, Economic Planning, Sustainable Development and Information Technology	World Bank: St. Vincent and the Grenadines Regional Disaster Vulnerability Reduction Project – total value $144mn	*Loan*	*5,000,000*	Components 1 and 4	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
	World Bank: OECS Regional Agricultural Competitiveness Project- total value $4.3mn	*Loan*	*2,000,000*	Component 3	*Low*	
	World Bank: Human Development Service Delivery Project- total value $10.7mn	*Loans*	*800,000*	Components 1 and 4	*Low*	
Basic Needs Trust Fund Programme		*Loan*	*225,478*	All project components/outputs	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
St Vincent and the Grenadines Preservation Fund		*Grant*	*65,037*	Components 1 and 2	*Low*	The UNDP Country Office will monitor the co-financing contributions to the project
		TOTAL CO-FINANCING	***USD 12,138,375***			

ANNEX P. GEF BD-1 TRACKING TOOL

Included in ProDoc package as separate file.