PROJECT DOCUMENT

Commonwealth of Dominica

United Nations Development Programme

Global Environment Facility

Supporting Sustainable Ecosystem by strengthening the Effectiveness of Dominica's Protected Area System

GEFSEC PROJECT ID: 5761; GEF AGENCY ID: PIMS: 5089; AWARD ID: 00082944

UNDAF Outcome(s):	Improved governance and regulations of environmental and energy issues for more resilient economies by 2016
UNDP Strategic Plan 2014-2017 Primary Outcome	Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded
UNDP Strategic Plan Output(s): *1.3.* Solutions developed at national and sub-national level for sustainable management of natural resources, ecosystems services, chemicals and waste	
UNDP Strategic Plan Secondary Outcome: [*UNDP's Biodiversity and Ecosystems Global Framework 2012-2020*:] Signature Programme #2: Unlocking the potential of protected areas (PAs), including indigenous and community conserved areas, to conserve biodiversity while contributing to sustainable development	
Expected SPD Outcome(s): Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance.	
Expected M-CPAP Output(s): Output 1.4: Knowledge and good practices disseminated and capacity development in the areas of natural resource management, disaster risk reduction, climate change, renewable energy, energy efficiency, low carbon emissions, biosafety and adherence to international standards and norms.	
Executing Entity/Implementing Partner: Ministry of Health and the Environment; The Environmental Coordinating Unit.	
Implementing Entity/ Responsible Partner: Forestry, Wildlife and National Parks Division (FWNPD) in the Ministry of Agriculture and Fisheries (MoAF).	

Brief Description

Dominica has of a national PA system consisting of six (6) terrestrial and one marine park, however, the reality is that only three (3) of the PA are legally constituted, while two of the noted sites have been partially developed commercially and are no longer considered suitable as national parks, the other site is a potential marine protected area that has yet to be designated. This PA estate is supported by the **The National Parks and Protected Areas Act No. 16 of 1975,** amended by Acts 54 of 1986, Act 12 of 1990, and Act 8 of 2001 is the principal piece of legislation relating to the management of national parks in Dominica. The Act provides for the declaration of both national parks and protected areas, leasing of land for protected areas, the establishment of a System of National Parks and Protected Areas. The Act also makes provisions for the creation of a National Parks Service to manage a System of National Parks and Protected Areas. Despite the Act, there is no PA Management system, the designated World Heritage site has no buffer-zone hence the core zone is threatened as is the case for all other PAs. Systemic and site management of the PAs is poor and the revenue generation potential not maximized, hence PA is undercapitalized and local and global benefits are at risk.

This project will use GEF incremental support to build Dominica's national capacity to manage its PA system with emphasis on the MTPNP and its buffer zone; to improve management effectiveness create sustainable livelihood activities and improve biodiversity conservation. Project implementation will ensure replication and dissemination of lessons learnt at the other sites (Parks, Trails, and nature Sites), and other GEF funded activities locally and regionally. This project will develop a protected areas management system in keeping with recommendations from previous initiatives like the OPAAL project and the National Parks Consortium Studies. Using the GEF funding this project will strengthen the sustainability of Dominica's PA system by developing a sustainable financial management plan, site specific management plan for Morne Trois Piton National Park, ensure the legal establishment of a buffer zone for MTPNP, create community atlases for local communities in and around the buffer zone thus establishing living landscapes. GEF funding will also be used to build capacity at the systemic and community level to effectively manage PAs and their buffer zones.

Programme Period:	2012-2016
Atlas Award ID:	00082944
Project ID:	00091618
PIMS #	5089
Start date:	July 2015
End Date	July 2019
Management Arrangements	NIM
PAC Meeting Date	20 Nov 2015

Total resources

Total allocated r
- G
- M
- U

- *In-kind con*

Agreed by Government of Dominica: ANDERSON PARILLON 05/04/2016
Date/Month/Year

Agreed by Environmental Coordinating Unit, Dominica:
Date/Month/Year

Agreed by UNDP:
Date/Month/Year

Brief Description

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Atlas Award ID:	00082944
Project ID:	00091618
PIMS #	5089
Start date:	February 2016
End Date	February 2020
Management Arrangements	NIM
PAC Meeting Date	_____

Total resources required:	**9,407,306**	
Total allocated resources (cash):	*3,207,306*	
○ GEF (cash)		1,707,306
○ Ministry of Tourism (cash)		1,200,000
○ UNDP		300,000
• *In-kind contributions:*	*6,200,000*	
○ Ministry of Agriculture and Fisheries		1,200,000
○ Ministry of Health and Environment		5,000,000

Agreed by (Government): _____

Date/Month/Year

Agreed by (Executing Entity/Implementing Partner): _____

Date/Month/Year

Agreed by (UNDP): _____ 14/04/2016

Date/Month/Year

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Acronyms

APR	Annual Project Report
AWP	Annual Work Plan
ARR	Annual Review Report
BAM	Banana Accompanying Measures
CNP	Cabrits National Park
CARICOM	Caribbean Community Common Market
CARIFICO	Caribbean Regional Fisheries Co-Management
CARPHA	Caribbean Public Health Authority
CATS	Caribbean Aqua-Terrestrial Solutions
CBD	Convention on Biological Diversity
CBF	Caribbean Biodiversity Fund
CBO	Community Based Organization
CCCCC	Caribbean Community Climate Change Centre
CCI	Caribbean Challenge Initiative
CDR	Combined Delivery Report
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO	Country Office
CPACC	Caribbean Planning For Adaptation to Climate Change
CPAP	Country Program Action Plan
CRMP	Community Resource Management Plan
CSO	Civil society organisation
CTA	Chief Technical Advisor
DDFWNP	Forestry, Wildlife and Natural Parks Division
DOAM	Dominica Organic Agriculture Movement
DOMLEC	Dominica Electricity Company Ltd.
DOWASCO	Dominica Water and Sewerage Company
DNCW	Dominica National Council of Women
ECDSS	Eastern Caribbean Decision Support System
ECMMAN	East Caribbean Marine Management Area Network
ECU	Environmental Coordinating Unit
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Agreement
EU	European Union
FAO	Food and Agriculture Organization
GAP	Good Agriculture Practice
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Green House Gas
GIS	Geographic information system
GIZ	German Government's Agency for International Cooperation / (Deutsche) Gesellschaft für Internationale Zusammenarbeit
GNI	Gross National Income
GoCD	Government of Commonwealth of Dominica
GSPS	Growth and Social Protection Strategy
HDI	Human Development Index

IA	Implementing Agency
IDP	International Development Partners
INRM	Integrated Natural Resource Management
IUCN	International Union for the Conservation of Nature
IW	Inception Workshop
IWCAM	Integrated Watershed and Coastal Area Management
LAMA	Local Area Management Authority
MEA	Multilateral Environmental Agreement
METT	Monitoring and Evaluation Tracking Tools
MoAF	Ministry of Agriculture and Fisheries
MPA	Marine Protected Area
MDNP	Morne Diablotin National Park
MTPNP	Morne Trois Piton National Park
MTPNP WHS	Morne Trois Piton Nation Park World Heritage Site
NBSAP	National Biodiversity Strategy and Action Plan
NEMS	National Environmental Management System
NGO	Non-Government Organization
NIM	National Implementation Modality
NP	National Park
NPPAA	National Parks and Protected Areas Act
NPU	National Parks Unit
OECS	Organization of East Caribbean States
OPAAL	OECS Protected Areas and Associated Livelihoods
PA	Protected area
PACU	Protected Area Coordinating Unit
PAS	Protected area system
PC	Project Coordinator
PIR	Project Implementation Reviews
PoWPA	Programme of Work for Protected Areas
PPR	Project Progress Report
PSCM	Project Steering Committee Meetings
PSC	Project Steering Committee
RBM	results-based management
RCU	Regional Coordinating Unit
REDD	Reducing Emissions from Deforestation and forest Degradation
SBAA	Standard Basic Assistance Agreement
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SPACC	Special Program on Adaptation to Climate Change
SPCR	Special Project on Climate Resilience
SSMR	Soufriere Scots-head Marine Reserve
SWOT	Strength Weakness Opportunity Threats
TNC	The Nature Conservancy
TOR	Terms of Reference
UNCCD	United Nations Convention to Combat Desertification
UNCLOS	United Nations Convention on Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNDAF	United Nations Development Assistance Framework

UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USAID	United States Agency for International Development
WNT	Waitukubuli National Trail
WWF	World Wildlife Fund

SECTION I: Elaboration of the Narrative

PART I: Situational Analysis

INTRODUCTION

1. The Commonwealth of Dominica is the most northerly of the Windward Islands in the Lesser Antilles, lying between Guadeloupe and Martinique. The island measures 29 miles (40 km.) by 14 miles (22 km) and covers an area of 289 square miles (751 km²). The length of Dominica's coastline is 148 km with a small continental shelf of 900 km^2. The island represents one of the richest biodiversity centres in the wider Caribbean. Much of this biodiversity is at risk due to the absence of appropriate management structures and systems.
2. This document represents Dominica's request for GEF incremental funding for the project 'Supporting Sustainable Ecosystem by Strengthening the Effectiveness of Dominica's Protected Area System'. Although this is primarily a biodiversity project, land degradation and climate change themes are reflected since they both have significant impact on biodiversity.

CONTEXT AND GLOBAL SIGNIFICANCE

Environmental Context

3. The Commonwealth of Dominica is the most northerly of the Windward Islands, and at the mid-point of the Lesser Antillean chain. It lies between the French islands of Guadeloupe (c.28 km to the north) and Martinique (c.40 km to the south). The island is c.47 km long by 26 km wide, and is divided into 10 administrative parishes. Dominica is one of the youngest islands in the Lesser Antilles. Its volcanic origins have created an island characterised by very rugged and steep terrain. The volcanic cone of Morne Diablotin (1,447 m), along with Morne Au Diable on the northern peninsula, dominates the topography of the northern half of the island, while a chain of mountains (including Morne Trois Pitons, Morne Micotrin, Morne Watt, Morne Anglais, and Morne Plat Pays) extends through the south of the island. The island's coastline is rocky with few beaches. Dominica's climate is classified as humid tropical marine, characterised by little seasonal or diurnal variation and strong, steady trade winds. The island is among the wettest in the Caribbean, a factor which gives rise to its lush vegetation. Rainfall is higher in the interior which receives >10,000 mm annually, and drops off substantially to 1,200 mm per year on the leeward (western) side of the island. Sixty-five percent of the island area is covered by natural vegetation. There are five (5) major terrestrial ecosystems; mature tropical rainforest, montane thicket and cloud forest (elfin woodland), and littoral woodland along the windward coast, to which coastal swamp and dry scrub woodland is added in some documentation.
4. The small size and insularity of the West Indies influences the number of terrestrial species that occur in the region, including the relatively high concentration of endemism and the vulnerability to biodiversity loss due to catastrophic events and long term human induced habitat changes or climate change. Dominica's high plant diversity consists of approximately 155 families, 672 genera and 1226 species of vascular plants. The number of indigenous species include *Pteridophytes* (194), *Gymnosperms* (1), *Monocotyledons* (518) and *Dicotyledons* (1,445). Eighty-one (81) plant species are IUCN listed with one (1) Critically Endangered (Small-leaved Mahogany *Phycolepidozia exigua*), four (4) Endangered (Bois Doux Avocat, Commoner Lignumvitae, Small-leaved Mahogany, Pouteria pallid), six (6) Vulnerable (Contrevent *Pouteria semecarpifolia*, Large-leaved Mahogany *Swietenia macrophylla*, Spanish Cedar *Cedrela odorata*, *Freziera cordata, Inga dominicensis, Magnolia dodecapetala*) and one (1) near-threatened (Big Pine Key Prickly-pear *Opuntia triacantha*) (IUCN 2013).

5. IUCN lists eleven (11) bats species from six (6) families native to Dominica, all Least Concern and not in any threatened category due to their abundance and wide distribution, except for *Myotisdominicensis*, listed as Vulnerable due to its ongoing population reduction and small geographic range. All other six (6) mammalian species are introduced. A total of 208 species of birds have been recorded for Dominica, of which about 66% are neotropical migrants and 34% (62 species) are resident species. Most significantly though, Dominica supports two (2) single island endemic Amazona parrots; *Amazona imperialis* (Imperial Parrot, Endangered) and *Amazona arausiaca* (Red-necked Parrot or "Jaco", Vulnerable). For Dominica, BirdLife/IUCN lists three (3) globally threatened bird species including; (1) Endangered (*Amazona imperialis* Imperial Parrot), and two (2) Vulnerable (*Amazona arausiaca* Red-necked Parrot or "Jaco", and Forest Thrush). There are three (3) Near Threatened species listed (*Charadrius nivosus* Snowy Plover, *Calidris pusilla*, Semipalmated Sandpiper, and *Egretta rufescens* Reddish Egret) and the remainder are Least Concern. Nineteen (19) of the thirty-eight (38) Lesser Antilles EBA restricted-range birds occur on the island, including the Blue-headed Hummingbird *Cyanophaia bicolor* which occurs just on Dominica and neighbouring Martinique, and Plumbeous Warbler *Dendroica plumbea* which is shared only with Guadeloupe. Four (4) IBAs have been established for Dominica, for which all nineteen (19) restricted range species are in the MTPNP IBA. Nineteen (19) reptile species have been recorded for Dominica consisting of fifteen (15) terrestrial species and four (4) marine species. The fifteen (15) terrestrial reptiles include ten (10) lizard species, four (4) sub-species of snake and one (1) tortoise species. Of the ten (10) species of lizards, the Ground Lizard *(Ameiva fuscata*) and the Tree Lizard *(Anolis oculatus*) are endemic. The Lesser Antillean Iguana *(Iguana delicatissima)* is endemic to a few islands of the Eastern Caribbean, from Anguilla to Martinique. Three (3) species of litter lizards have been recorded on Dominica; *Sphaerodactylus fantasticus*; *S. vincenti*; *and S. microlepsis*. Of the five (5) species of snakes, *Typhlops dominicana* is endemic to Dominica, while *Alsophis antillensis* and *Liophis juliae* are endemic to the Lesser Antilles. The Boa constrictor (*Constrictor constrictor nebulosa*), which is the largest snake on the island, is widely distributed throughout Dominica. The amphibian fauna in Dominica consists of four (4) species of frogs, of which only the Critically Endangered *Leptodactyllus fallax* (Mountain Chicken) is endemic to Dominica and Montserrat. The class Insecta has not been fully surveyed on the island. Fifty-five (55) species of butterflies have been recorded in Dominica. Two (2) species are endemic to the island and seven (7) are endemic to the Lesser Antilles and are confined to montane areas in Dominica and Guadeloupe. Eleven (11) species of *Phasmids* (stick insects) have been recorded for Dominica One (1) species (*Diapheromera saussurei*) is a confirmed endemic of Dominica, while two (2) others (*Diapherodes gigantea dominica* and *Lamponius dominicae*) are endemic but need further investigation. Freshwater macroinvertebrates are believed to include 116 taxa, of which the dominant ones collected were gastropods, ephemeropterans, odonates, hemipterans, trichopterans, and dipterans. There are sixteen (16) species of freshwater fishes for Dominica, of which five (5) are IUCN listed: The Smalltooth Sawfish (CR), found primarily in estuarine and nearshore habitat including mangrove and seagrass habitats, is listed as possibly extinct in Dominica as is throughout most of its former range. The Tarpon *Megalops atlanticus* (VU), Mountain Mullet *Agonostomus monticola* (LC), Malacho (estuarine species *Elops smithi)* and Titi *Sicydium plumier* are DD. There are no crustaceans documented as endemic to the island and most are widely distributed in the Caribbean.

6. The coastal and marine ecosystems of Dominica include coral reefs, seagrass beds, mangroves and rocky shores all of which support a rich variety of reef and pelagic fish species, lobsters, conch, sea turtles, few mangrove, and resident and migratory birds. Dominca's nearshore marine habitat was categorized into four benthic habitat categories: rock, sand, seagrass and coral. Coral reefs play a vital role in protecting the coastline against wave action during storms, and constitute the most complex habitat. The most extensive seagrass beds (248ha) dominated by the seagrass *Syringodium filiforme* as well as *Halophila decipiens and H. stipulacea* and the second largest area of coral reefs on the island were found along the western and northern regions which also contained 88% of the island's sandy environments. Conflicting data on coral reef estimates range from 70 km^2 (Reefs at Risk

in the Caribbean)[1] to 45 km[2] (UNEP-WCMC and NOAA)[2], to 72.2 ha[3]. Of the seventy-one (71) hard coral species (order SCLERACTINIA) known to occur in the Lesser Antilles[4], fifty-three (53) species from nine (9) family taxa are identified as occurring in Dominica[5]. Ten (10) species of coral are IUCN listed as CR., E, and V, which includes the CR *Acropora cervicornis* (Staghorn Coral) and *Acropora palmata* (Elkhorn Coral). Mangrove stands never became large as in other islands, limited by climatic and edaphic factors on Dominica. However, there are small areas with black mangrove (*Avicennia germinans* L.) and white mangrove (*Laguncularia racemosa* L.), with the possible presence of *Avicennia* species.

7. There are approximately 493 species of marine fish tabulated for Dominica[6]. Of these, 324 are reef-associated fishes and twenty-one (21) are IUCN Red-listed (2 Critically Endangered, 4 Endangered, 15 Vulnerable), including the CR *Callionymus bairdi (*Lancer dragonet) and *Epinephelus itajara (*Atlantic goliath grouper). There are also twenty (20) Shark, Ray and Mako species from eleven (11) Families, of which the seven (7) are globally threatened (1 Critically Endangered, 2 Endangered, 4 Vulnerable), including the CR *Pristis pectinata (*Smalltooth Sawfish). There are also twenty-seven (27) pelagic species listed. Three (3) species of sea turtles are known to nest on the beaches of Dominica: IUCN listed Critically Endangered Hawksbill turtle (*Eretmochelys imbricata*), Endangered Green turtle (*Chelonia mydas*), and the Vulnerable Leatherback. . Nine (9) whales from four (4) Families are IUCN listed for Dominica of which only one (1) is Vulnerable (*Physeter macrocephalus* Sperm Whale). There are 9 species of Dolphin from the Delphinidae family, three (3) species of whale from the family Balaenopteridae. *Tursiops truncatus* (Common Bottlenose Dolphin) are included in this list.[7]

8. Additional information on ecosystems and biodiversity is provided in Part II (Project Protected Areas Site Information) and in consultant's technical report.

Socioeconomic Assessment

9. The 2011 Preliminary Population and Housing Census reported the country's population at 71,293 comprising of 36,411 males and 34,882 females - a population growth rate of 0.216%. The number of births over the decade (2002 and 2010) recorded 10,207 that reflected a decline of 4,696 when compared to the previous decade. The country continues to record steady decreases in births, an increasing ageing population and outward migration of the productive population.

10. Economic activities in Dominica include agriculture (21% of GDP), industry (22.4% of GDP) and services (56.3% of GDP) (CIA, The World Fact book, 2012). The Country Poverty Assessment Report 2008-2009 indicated a decrease of 10 % in the indigence rate from 2002/03 and a decrease of the poverty rate from 39% to 2.88% over the same period. Unemployment was also estimated at 14% compared with over 20 % in 2002.[8]

11. According to statistics released by the United Nations Development Programme (UNDP) "Human Development Report 2014", Dominica's HDI value for 2013 is 0.717. Between 2000 and 2013, Dominica's HDI value increased from 0.691 to 0.717, an increase of 3.7 percent or an average annual increase of about 0.28 percent[9]. Dominica has

[1] Burke L. and J. Maidens (2004). Reefs at risk in the Caribbean. Washington: World Resurces Institute. 80 p.
[2] UNEP-WCMC and NOAA *in* Burke L. and J. Maidens (2004). Reefs at risk in the Caribbean. Washington: World Resurces Institute. 80 p.
[3] Steiner, S.C.C. 2003. Stony Corals and Reefs of Dominica (Lesser Antilles). Atoll Res. Bull. 498.
[4] Miloslavich *et al.* (2010) http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0011916
[5] IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on **12 February 2014**.
[6] Fishbase (2014). http://www.fishbase.org/Country/CountryChecklist.php?showAll=yes&c_code=659&vhabitat=all2. Accessed March 23, 2015.
[7] IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. <www.iucnredlist.org>. Downloaded on 13 February 2014.
[8] Fourth Medium-Term, Growth and Protection Strategy (GSPS) 2014-2018 – Towards Economic Transformation: A Pathway to Sustainable Development, Commonwealth of Dominica
[9] UNDP Human Development Report 2014-

been ranked ninth among CARICOM countries in human development. Globally Dominica was ranked at 93 out of 187 countries and territories. According to the report, Dominica's life expectancy stands at 77.7 and the Gross National Income (GNI) per capita were valued at US$9,234.

12. Dominica's economy has traditionally relied heavily on agriculture. Loss of preferential trading arrangements for bananas with the United Kingdom and the European Union, and the intensification of globalization and trade liberalization constitute the major sustainable human development challenges facing the country. The banana industry has been the major source of foreign exchange earnings until the 1990s. In 1993, the agricultural sector was the highest contributor to GDP accounting for 23.79% (EC$94 million). This declined to 16.78% (EC$73 million) in 2001. The progressive decline over the period has been attributed to the reduction in total agricultural exports from EC$82 million in 1993 to EC$39 million in 2001, due mainly to the significant reduction in banana production and export from 55,468 tonnes (EC$67 million) in 1993 to 19,055 tonnes (EC$22 million) in 2001. Agriculture is still considered a major pillar of the economy. Other economic development efforts are based on agro-processing, manufacturing, fishing and more recently, tourism.

13. Dominica is highly dependent on its natural resources and agriculture sectors. Agriculture accounts for about 20% of GDP. Tourism, which is are largely dependent on the PAs, generates nearly 11% of GDP, providing not only direct revenues but also fuelling growth in other industries. This is a significant change from the early 1990s when tourism accounted for 2% of GDP.

14. Over the past decade, stay-over tourism has shown slow but steady growth of approximately 1% per year. In 2013, 75,096 stay-over tourists visited Dominica. Cruise tourism, on the other hand has fluctuated widely, and in 2010-2013 this market segment entered a decline. In each of these years, cruise tourism declined by 12% per year. In 2013, 230,587 cruise passengers visited Dominica.

15. Fisheries contribution to GDP increased over the period 2005 -2009 from 0.39% to 0.47% and decreased from 0.47% in 2009 to 0.36% in 2012. Fisheries contribution to foreign exchange earnings is negligible.

16. The manufacturing sector (including agro-processing) constituted 3.6% of GDP in 2013. Over the past 10 years, manufacturing has contributed an average of 4.5 percent to GDP. Its contribution to growth, earnings and employment has been deemed significant.

17. Dominica's Growth and Social Protection Strategy reported that the economy recovered in 2003. This positive growth performance continued up to 2008 to register positive growth in 2010 and 2011 and resumed positive growth in 2013. The report indicated that the economy remains at a crossroads as it grapples with the consuming challenge of sustaining growth, keeping poverty levels on a downward trajectory and improving living standards of the population. Dominica is rated by the "Commonwealth Vulnerability Index" as having the sixth (out of 111 countries evaluated) most vulnerable economy (to external shocks and natural hazards) in the world, and the most vulnerable in the Caribbean.

Dominica's Protected Areas Estate: Establishment of Forest Reserves, National Parks and Proposed Buffer Zones, Forest Reserves and National Parks

18. Since 1975, Dominica has established several protected areas (PAs) with varying designations, covering 203.8 km^2, approximately 27% of the island's 751 sq. km. In addition to the island's three (3) national parks (Morne Diablotin, Cabrits, and the Morne Trois Pitons National Parks), there are the Northern and Central Forest Reserves, Stewart Hall Water Catchment, and Soufriere/Scott's Head Marine Reserve (SSMR). Additional terrestrial and marine sites are proposed for protection but are not formally designated. PAs fall primarily under the responsibility of the Division of Forestry, Wildlife, and National Parks (DFWNP) and the Fisheries Division, Ministry of Agriculture and Fisheries (MoAF). Each of the marine reserves, the responsibility of the Fisheries Division, are managed by a Local Area Management Authority (LAMA).

19. There are seven (7) legally established PAs of Dominica, both marine and terrestrial, that would constitute a System of Protected Areas (Table 1). The list also includes an additional three (3) proposed sites that would also fall under a System of Protected Areas if/when legal designation is obtained. Draft management plans have for been prepared for Morne Trois Pitons, Morne Diablotin and Cabrits National Parks as well as for Soufriere Sulphur Springs, but none have been approved by Cabinet nor implemented. Cabrits National Park (CNP) includes both a marine and terrestrial portion. The DFWNP and the Fisheries Division were unable to agree on a single management plan for the CNP due to different management philosophies (promoting non-consumptive vs. consumptive uses, respectively), resulting in 2 discrete plans. A 2011 draft Buffer Zone Plan for the Morne Trois Pitons National Park (MTPNP) was developed though not yet approved nor implemented.

20. The Central Forest Reserve covers an area of 410 ha (1013 acres) and the Northern Forest Reserve 5,560 ha (13,733 acres). Until 2000, the Northern Forest Reserve was 8,814 ha (21,770 acres); approximately 3450 ha (8525 acres) of this site was re-designated as the Morne Diablotin National Park (MDNP) in January 2000 in order to provide increased protection to the habitat of the 2 single island and globally threatened parrot species.

21. Dominica's National Park System comprises three (3) legally established national parks: MTPNP 6,875 ha, was established in July, 1975 and designated World Heritage Site in 1997 under Natural **Criteria viii** - "To be outstanding examples representing major stages of the earth's history, including the record of life, significant on-going geological processes in the development of landforms or significant geomorphic or physiographic features" and **criteria x.** "To contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation**".**

Table 1: Protected Areas in Dominica

Designation Type/ Name of Protected Areas	Status	Year of designation	Area (ha)	IUCN category
International (World Heritage Site)				
Morne Trois Pitons National Park	Designated	1997	6875	Not Applicable
National				
Forest Reserve				
Central	Designated	1952	410	VI
Northern	Designated	1977	8814	VI
Marine Reserve				
Soufriere/Scott's Head	Designated	1998	0.00	V
National Park				
Cabrits	Designated	1987	531 (421 marine)	II
Morne Trois Pitons	Designated	1975	6875	II
Morne Diablotin	Designated	2000	3450	II
Protected Forest				
Stewart Hall Water Catchment	Designated	1975	318	VI
Total Area (Designated)			20,380 ha	
Other				

Indian River	Proposed	1995	79	Not Reported
Soufriere Sulphur Springs	Proposed	1995	102	Not Reported
Primeval Reserve				
Syndicate Parrot	Proposed	1989	083	Not Reported
Total area (ha) (Proposed)			**264 ha**	

22. This Project's target PAs, the MTPNP is a 6,875 ha mountainous site located in the southern volcanic complex of the island that includes four of Dominica's seven mountain ranges. MTPNP includes large highly scenic tracts of the most extensive almost undisturbed tropical forest in the Lesser Antilles and the headwaters of most of the major streams and rivers in the southern half of the island. The upper watershed of several of Dominica's larger rivers, including the Roseau River, Melville Hall River, Layou River, Rosalie River and Pointe Mulatre River are located in Morne Trois Piton or Mount Diablo. Five water catchments are contained totally or partially within the PAs: these are namely Grand Fond, Londonderry, Roseau WA1, Dublanc and Portsmouth. Importantly, the water catchment area providing water for hydro-electricity generation is contained in part within the MTPNP. These support a high level of biodiversity. MTPNP lies within a Conservation International - designated Conservation Hotspot, a WWF/IUCN Centre of Plant Diversity and a Bird Life - designated Endemic Bird Area. Many of the birds are migratory, while sixty species breed on the island. Dominica's resident birds include two single-island endemics and nine regional endemic species. Dominica's two endemic parrot species - the imperial parrot or Sisserou" (*Amazona imperialis*) and the red-necked parrot or "Jaco" (*Amazona arausiaca*) are both considered threatened (IUCN Red Data List) and are "specially protected" birds under Dominican law. The most recent (1999) population estimate put the parrot populations at approximately 200 *A. imperialis*, and 1,500 *A. arausiaca*. Although *A. imperialis* may never have been abundant in Dominica, it is now considered to be the world's most critically endangered Amazon parrot. Both species have been negatively impacted by the combined effects of forest clearance for agriculture and the damage to the forests caused by hurricanes. The populations of these two endangered parrots reached critical levels, as low as 60 *A. imperialis* and 200 *A. arausiaca,* following Hurricane David in 1979[10].

23. CNP, 532 ha (1,314 acres) was established in 1987, a combined terrestrial and marine park, protecting historical resources forests, coral reefs and wetlands. The MDNP, 3,337 ha (8242 acres) was established in 2000 primarily to protect the habitat of the endangered Sisserou Parrot. The 4,747 foot high Morne Diablotin is the island's highest, and second highest mountain in the Lesser Antilles.

24. Other PAs include two marine reserves (SSMR, in the southwest, the first Marine Protected Area (MPA) to be legally established in Dominica and the CNP Marine Section, in the north). The Indian River has also been designated an ecotourism site and is under consideration for designation as a NP. The SSMR is managed by the SSMR LAMA comprising representation from the communities and other major stakeholders. The same type of management system has been recommended for the Cabrits. The 79 ha Indian River was proposed as a National Park in 1995 but to date has not been legally gazetted.

25. The Waitukubuli National Trail (WNT) was constructed by the Government of the Commonwealth of Dominica (GoCD) from 2007-2011,[11] a major investment of over XCD $16 million mainly funded by European Union and implemented in partnership with the Regional Council of Martinique. WNT is managed by a Trail Management Unit under the DFWNP. The 115 miles/184 km longitudinal trail corridor runs the entire island from Scotts Head in the South to Capuchin and back to the CNP in the North. This nature trail is made up of fourteen segments of

[10] Dominica national Biodiversity Strategy and Action Plan 2001

[11] Final Draft -Sustainable Management Plan and Structure for the Waitukubuli National Trail- Prepared by: Waitukubuli National Trail Management Unit -September 2013

varying lengths and levels of difficulties. The trail consists of old slave routes, traditional tracks and extended new paths into Dominica's virgin forests and encompasses about seventy percent (70%) state lands and thirty percent (30%) private lands. The trail has an accumulative ascent of 13,800 m, (twice as much ascent as climbing the famous Aconcagua, the highest peak in South America). The WNT traverses Dominica's Forest Reserves, the MTPNP WHS coastal areas, farm lands and gives access to several Eco-Tourist Sites. The trail connects or is in vicinity of thirty-two rural communities

26. Draft management plans have for been prepared for Morne Trois Pitons, Morne Diablotin and Cabrits National Parks as well as for Soufriere Sulphur Springs, but none have yet been approved by Cabinet nor implemented. CNP includes both a marine and terrestrial portion. The Fisheries Division and the DFWNP were unable to agree on a single management plan for the CNP due to different management philosophies (promoting non-consumptive vs. consumptive uses, respectively), resulting in 2 discrete plans. A 2011 draft Buffer Zone Plan for the MTPNP was developed though not yet approved nor implemented. The management plan for the SSMR and is currently being reviewed under the Caribbean Aqua Terrestrial Solutions (CATS) programme. A 5 year management plan (2007- 2012) for the Marine component of the CNP was developed under the Organization of Eastern Caribbean States (OECS) Protected Areas and Associated Sustainable Livelihoods (OPAAL)12 Project in 2006 but to date no plans have been approved or ratified by Cabinet.

Financial Sustainability of Dominica's PAs

27. Dominica's PAs form the core strategy in ensuring a sound natural resource base, as well as, meeting the country's conservation obligations under the Convention of Biological Diversity (CBD). In addition, the PA estate contributes significant value to the national economy, primarily in that it underpins a large portion of the national tourism industry, the fastest growing economic sector. However, despite the substantial economic potential, the PAs in Dominica are severely underfunded. Moreover, the PA system is considered inadequate to meet national conservation goals, and further investment is required to expand and improve it.

28. Currently, there is no long-term PAS development plan in place, nor are there management plans for individual PAs. Relatively few conservation activities are taking place in the majority of the PAs and there is an absence of a historic financial data series to understand current trends and sources of funding. Furthermore, the multiplicity of management approaches and managing entities complicates a systemic understanding of the PA estate's financial situation. These challenges highlight the need for a comprehensive methodological approach to facilitate the development of a robust financial process that reflects a link between PA management tools, implementing partners and institutional strengthening for PA management.

29. There are two major sources of funding for the management of PAs: governmental budgets and self-generated funds. Among the variety of mechanisms in place it is worth mentioning the entrance fees, different user fees and use charges as limited sources of financing. Dominica's PAs have traditionally been funded from the government treasury and given low priority, as they were seen to have little to contribute to the national development process. Recurrent budgets are commonly just enough to keep only basic management structures in place, and capital budgets are insufficient to prevent depreciation and decay of PA infrastructure. As a result of the minimal financial resources allocated by the government, the budget barely allows for the maintenance of immediate management functions and key staff, though both agencies are looking at ways in which to increase self-generated revenues.

30. It is clear that the current composition of mechanisms and sources is insufficient and inadequate, since it is not, as far as can be determined, meeting the financial needs of the PA estate, nor is it taking full advantage of potential funding and market-based opportunities.

[12] Gardner, Lloyd. 2006. Review of the Policy, Legal, and Institutional Frameworks for Protected Areas Management in Dominica. Environment and Sustainable Development Unit, Organization of Eastern Caribbean States

Institutional framework for national parks and protected areas

31. Responsibility for environmental conservation and natural resource use in Dominica is shared among a number of ministries and their respective agencies/divisions/units, as well as civil society and community groups. The GoCD has established a National Environmental Committee, which functions as an advisory committee to Cabinet. All sectoral environmental strategies must be approved by this committee before submission to Cabinet. To be noted, is that in December 2014, during the project development phase, there was a general elections which resulted in Departments and Units shifting into different Ministries, the new positions were not confirmed at the time of submission of this project document.

DIVISION OF FORESTRY, WILDLIFE AND NATIONAL PARKS

32. The administration, management and control of the national parks system in Dominica is vested under the National Parks and Protected Areas Act, NPPAA, to the Minister responsible for the national park system, in this case the Minister for Agriculture. There are multiple divisions within the MoAF including the Agricultural Investment Unit, DFWNP, Agriculture, Fisheries as well as Administration. The DFWNP is responsible for the conservation, management and sustainable resource use of all Forest Reserves, National Parks, nature sites and the WNT in Dominica, as well as soil and water conservation, enforcement of forestry, wildlife and national parks legislation, research and monitoring, public relations and environmental education, and the upgrading and developing the infrastructure, institutional capacity and resources for implementing the Division's mandate. This Division collaborates with external research organizations and inter-governmental institutions, reports under the relevant Multilateral Environmental Agreements (MEAs), and interacts with private, public and civil society stakeholders and stakeholder organizations.

33. Within the DFWNP, there are multiple units or sections. The Conservation, Protection & Maintenance Section is responsible for enforcing several pieces of legislation and their accompanying regulations as they pertain to the protection and management of terrestrial natural resources, as well as the issuing of licenses and permits for hunting, fishing and timber extraction. They are responsible for the island's endangered and endemic species and conservation efforts, including for the IUCN listed Sisserou parrot (*Amazona imperialis*), Jaco Parrot (*Amazona arausiaca*), Capaud frog (*Leptodactylus fallax*).

34. The Ministry develops the broad policy framework to guide the development of these resources. The DFWNP of the MoAF is responsible for the management and development of National Parks including marine parks. The Marine Park designation was instituted in 1986 but to date there has been no effective management of the Park or its resources. There is conflict of jurisdiction between the DFWNP and Fisheries Divisions for management of the marine resources. The Fisheries Act 61:60 (1987) under which the Fisheries Division is governed, makes provisions for the establishment and management of marine reserves. There is overlap with the NPPA Act of 1976 that gives jurisdiction to the Forestry and National Parks for the establishment and management of all national parks.

FISHERIES DIVISION

35. The **Fisheries Division** is responsible for fisheries research and management, extension and training, education and public awareness as well as the management of marine reserves and MPAs. Dominica has established two Marine Reserves to preserve and protect the marine environments. The Dominica Marine Reserve Service has been developed with the support of the Fisheries Division to provide an effective management body to protect, promote and educate about the marine environment on the west of the island. The Soufriere Scott's Head Marine Reserve (SSMR) located in the south and the The Cabrits Marine Reserve (CMR) in the north are both legally established (one as a marine reserve and one as a national park) but being run in an *ad hoc* manner. The Salisbury Marine Reserve awaits gazetting. These reserves are all fisheries driven, protecting valuable nursery grounds and spawning

areas, in conjunction with the growing dive tourism. At all stages of the process, local area management is implemented, thereby ensuring that all users have an equal say in the protection process. User fees are employed as a levy to ensure maintenance of the system; from dive boat moorings maintenance to paying warden stipends.

36. **Soufriere/Scotts Head LAMA**, was established under Statutory Rules and Orders No. 17 of 1998 to manage the SSMR. The Management Authority is made up of various stakeholders, though it employs wardens to carry out enforcement activities, collect user fees, and undertake maintenance activities.

THE ENVIRONMENTAL COORDINATING UNIT (ECU)

37. The Environmental Coordinating Unit (ECU) lies within the Ministry of Health and the Environment. The ECU was established in 1999 through Cabinet Decision, with the mandate to function as the "coordinating, facilitating, administering and collaborating body for all environmental and sustainable development management programmes, projects, and activities in the Commonwealth of Dominica." The ECU coordinates environmental activity and acts as the technical focal point for all MEAs, with responsibility for providing strategic guidance and coordinating the activities of government institutions and non-governmental stakeholders relevant to the implementation of MEAs. The ECU operates without any legal jurisdiction. The regular operations of the ECU are primarily focused on international project activities, including programs to implement the Rio Conventions. In support of this mandate, the ECU manages informal coordination mechanisms to bring together key stakeholders, and carries out public education programs to raise awareness nationally about environmental issues and their consequences. They are the agency responsible for the development of the National Biodiversity Strategy and Action Plans (2002 and 2014-2020) and reporting to CBD, with a supporting Biodiversity Committee tasked to provide technical support. Prior to national elections in December 2014, the ECU was part of the Ministry of the Environment, Natural Resources, Physical Planning and Fisheries, but this Ministry has since changed.

38. The **Environmental Health Department** is responsible for the health of the public through monitoring of the environment and instituting intervention measures to prevent impacts on health. Related to natural resources are those such as solid and liquid waste management, vector control, and water quality control.

PHYSICAL PLANNING DIVISION

39. The Physical Planning Division is responsible for land use planning, assessments (EIA), development control, regulation of mining operations, and many of the activities that would take place within potential buffer zones surrounding PAs. It is the executing arm of the Physical Planning and Development Authority, and is responsible for administration and operation of the system of planning.

DIVISION OF LANDS AND SURVEYS

40. The Ministry of Lands, Housing Settlement and Water Resource Management includes the Division of Lands and Surveys, which manages all unallocated State lands, carries out surveying/mapping, and maintains records of land sales and mining permits. This Ministry facilitates development in key sectors of the economy such as agriculture, tourism, road improvement and construction, water supply (increasing efficiency and effectiveness in water distribution services), and improving sanitation management, all relevant to natural resource and land management and issues of land degradation.

41. The level of coordination among these agencies and active management of all PAs varies depending on resource allocation, stakeholders' priorities, and the capacity and commitment to manage these sites. These agencies have different principles, and carry out their individual responsibilities. This contributes to confusion on the part of the community stakeholders and results in conflicts and inefficiencies in the use of limited financial and human resources. There is a need for greater collaboration, coordination, and management of PAs in order to reflect the socio-political realities of governance, and address the needs of the various stakeholder groups.

MINISTRY OF TOURISM

42. The 2013 Tourism Master Plan and 2010 Tourism Policy for Dominica includes a major focus on the development of natural and cultural resources as part of the tourism product. Co-management of the Trafalgar Falls and other nature/recreation sites take place with the National Parks Unit (NPU).

Protected area management and legal and regulatory framework

43. National Parks and Protected Areas declaration and the protection of natural resources in Dominica are managed primarily via the following legislation:

44. **The Forest Act (1958)** focuses on forest management and authorizes the legal establishment of Forest Reserves on Crown Lands and protected forests on private lands. Provisions for the declaration of these protected forests address the issue of private lands within a protected forest, including providing for the liability of, and compensation for, the landowner. Voluntary forest protection is also addressed. The ***Forest Ordinance Cap. 80, 1959*** covers the designation of forest reserves and includes the designation of private lands as protected forest for water or soil conservation or other public purposes, under which a water catchment area on private land was declared a protected forest (Stuart Hall Catchment Rules No. 11, 1975). The ***Forest Rules (SRO 17, 1972)***, subsidiary legislation of the Forest Ordinance, specifies prohibited activities in forest reserves and gives details on the issuing of licenses and permits for harvesting forest produce.

45. **The Forestry and Wildlife Act No. 12, 1976**, and the Forestry and Wildlife (Amendment) Act (No. 35), 1982 focus on the protection and management of wildlife within their forest habitat and provides for the creation of wildlife reserves. The Act makes provision for the protection and management of wild fauna and the management of their forest habitat, as well as for the creation of wildlife reserves, a provision which could also result in the situation where a wildlife reserve is declared within the boundaries of an existing PA. However, the Act does address PA management through prohibition of the introduction of alien species without a permit, prohibition on hunting in national monuments (though national monuments were not addressed in existing legislation), and species for declaration, but does not link to other legislation addressing species protection or to the national obligations under conventions such as CITES or CBD.

46. The **National Parks and Protected Areas Act No. 16 of 1975** (Cap. 42:02), amended by Acts 54 of 1986, Act 12 of 1990, and Act 8 of 2001 is the principal piece of legislation relating to the management of national parks in Dominica. The Act provides for the declaration of both national parks and PAs, leasing of land for PAs, the establishment of a System of National Parks and Protected Areas. The Act also makes provisions for the creation of a National Parks Service to manage a System of National Parks and Protected Areas. Although this Act speaks to the designation of national parks and PAs, only three national parks were established under this legislation (MTPNP, MDNP and CNP). This Act outlines the purposes for which PAs may be declared, and authorizes the MoAF, by order, to set aside state lands for PAs in the form of national parks, historic sites, and recreational areas, and specifies regulations the Minister may make for such areas. The Act also contains provisions for preparation of management plans for PAs, but no provision for the preparation of a system plan or annual reporting on the status of the system of PAs.

47. In order to strengthen the management of all categories of PAs, Dominica has drafted a new **Protected Areas Bill** to replace the existing National Parks and Protected Areas Act. This Bill has been submitted to the Cabinet of Ministers for endorsement. This new act is intended to harmonize existing laws and regulations regarding PAs and help to improve management efficiency and effectiveness. This Bill seeks to provide the legislative framework for the establishment, development and effective management of PAs and for related matters.

48. **Physical Planning Act (2002)** is intended to ensure that all development is carried out in an environmentally sustainable manner, and is the Act that addresses EIAs. The Act mandates that persons or agencies must apply to

develop land, addresses construction practices and includes provisions for prohibitions on land use activities that remove vegetation or disturb soils and geological resources, as well as the deposit of refuse or waste materials on land or causing environmental damage or actions affecting the health or safety of persons.

49. A new **Physical Planning Bill** was drafted under the OECS facility to effect the National Land Use Plan and strengthen the physical planning capability, and is currently awaiting approval and enactment. This is likely the strongest legislation regulating land use in the buffer zones around the MTPNP.

50. Dominica is currently in the process developing of a **National Land Use Plan** with support from the Caribbean Development Bank. The Plan and Policy are both expected to establish land use zoning based on environmental and economic criteria, with the goal of diminishing the conversion of suitable agricultural lands to other uses. The Plan and Policy will address integrated land use planning and watershed management; hazard reduction and climate change adaptation; and the protection of prime agricultural lands. At the regulatory level, in response to the devastating impacts of mining activities on marine ecosystems and coastal livelihoods, the Government ceased granting new licenses to land mining operations at the end of 2011 and is actively monitoring active mining operations to evaluate and mitigate negative impacts.

51. The National Land Use Policy is enabled through the *Physical Planning Act (2002).* Under the *Act*, the planning authority is authorized to prepare, or cause to be prepared a National Physical Development Plan to guide land use planning decisions in the country. The National Land Use Policy represents the overarching policy that guides the development of the National Physical Development Plan. Part III, 9(2) (a) of the *Physical Planning Act* requires that the National Physical Development Plan sets out a statement of the principle aims and objectives of the plan. The National Land Use Policy constitutes the principle aims and objectives with respect to directing development and land uses in Dominica.

52. The **Fisheries Act No. 11 of 1987** is an adopted harmonized fisheries legislation prepared for the East Caribbean islands and allows for the establishment of marine reserves. The Act provides for the establishment of local fisheries management areas, and authorizes fisheries research, prohibits the use of explosives or chemicals for fishing, and provides for the promulgation of regulations. The Act is supported by the Fisheries Regulations, 1989. The Beach Control Ordinance (No. 21), 1966 prohibits the use of beaches for public or commercial purposes without a license. The Fisheries Act also provides the legal basis for regulation of fishing, includes coral in the definition of fish, and provides oversight authority to the Fisheries Division for all marine species. This Act further provides for the declaration of marine reserves "where special measures are considered necessary" (specified in Section 22(1)), which allows for the declaration to meet conservation objectives other than fisheries management.

53. **Tourism (Regulations and Standards) Act, 2001**. This Act recognizes that the PAs form the base of the ecotourism product, and as such, ensures that all services offered at all national parks and marine management areas will focus primarily on tourists.

54. Additional legislative tools relevant to the use and management of coastal and marine resources include the following Acts: Territorial Sea, Contiguous Zone, Exclusive Economic Zones Act of 1981 (Maritime Areas Act # 26 of 1981); the Beach Control Act (1966, 1990); the Environmental Health and Services Act (1997), which provides authority relevant to maintain environmental health and control pollution; and the Pesticide Control Act which controls the importation and use of pesticides likely to end up in coastal waters.

55. Other relevant legislation, statutory rules and orders (SROs) addressing PAs include:

56. *Environmental Health Services Act (No. 8 of 1997):* This Act makes provision for the conservation and maintenance of the environment in the interest of health generally and in relation to places frequented by the public. Responsibility lies primarily with the Environmental Health Department. Its relevance to PAs is the permitting required by the placement of sewage treatment and disposal facilities, as well as addressing issues related to solid waste management and water quality in public places.

57. Crown Lands Ordinance (No. 60) and the Crown Lands Regulations (1961) govern the sale and release of government land.

58. *Land Acquisition Act (1953).* This Act is administered by the Lands & Survey Department and provides for private land acquisition for use beneficial to the State.

Protected area policy framework

59. Dominica ratified the Convention on Biological Diversity in 1994, and committed to biodiversity management through the preparation, approval and submission to the CBD of its **Biodiversity Strategy and Action Plan (NBSAP).** This plan was updated to address biodiversity strategy and actions for 2014-2020 and emphasises Dominica's national goals as they relate to biodiversity and PAs. The first goal is "The conservation and sustainable management of Dominica's terrestrial and marine biodiversity to ensure intra- and inter-generational equity." Target 5 (of 5) for 2020, is that at least 20% of terrestrial and 15% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through comprehensive ecologically representative and well-connected systems of effectively managed, PAs and other means, and integrated into the wider land and seascape. The NBSAP also includes priorities, strategies and action for the conservation and the sustainable use of natural resources, with a focus on biodiversity. Two of three goals listed in the NBSAP directly related to PA and natural resource management being addressed through this Project are (i) The conservation and sustainable management of Dominica's terrestrial and marine biodiversity to ensure intra- and inter-generational equity"; and (ii) The promotion of sound and sustainable agricultural practices and technology within existing agricultural human capital so as to minimize the loss of agro-biodiversity, and reduce vulnerability to desertification, soil loss, and the contamination of water resources."[13]

60. **The National Action Programme to Combat Land Degradation (2004)** identifies specific priorities to strengthen land use planning and policies and to implement land degradation mitigation measures.

61. **Low Carbon Climate Resilient Development Strategy** and the **Strategic Program for Climate Resilience (SPCR)** were approved by Cabinet in April 2012 to facilitate Dominica's transformation to a low-carbon climate-resilient economy while addressing pressing development, livelihood and poverty issues confronting the country.

62. **Growth and Social Protection Strategy (GSPS 2012-2014) s**pecifically addresses buffer zones around PAs, where the Government undertakes to "support the development of buffer zones around the PAs to check future development" and to "ensure environmentally sensitive design principles are applied in any form of development within the PAs and buffer zones

63. ***Draft* Forest Policy Statement for the Commonwealth of Dominica (2010)** was developed in order to guide the sustainable management of Dominica's forest resources, while maintaining or improving the present area of forest cover. The Policy covers all of Dominica's forested areas, including Forest Reserves, National Parks, Unallocated State Lands, Carib Territory, and Privately Owned Land. The Policy addresses natural forests, plantations, as well as deforested, degraded forests and agro-forests.

64. ***Draft* Policy Framework for Integrated (Adaptation) Planning and Management** addresses problems in climate change and rising sea-level taking into account, inter alia, beach and shoreline stability, destruction of wetlands/coastal ecosystems, reduced fish catch resulting from sedimentation of fishing banks and destruction of fish habitats, impact on tourism – waterfalls, lakes and rivers.[8] This policy outlines the critical risk management measures required to be taken by Government and the public to minimize the negative potential impacts of Global Climate Change on major vulnerable sectors including, *inter alia*, agriculture, human settlements and infrastructure, tourism, and finance.

[13] National Biodiversity Strategy and Action Plan 2014-2020

65. **National Environmental Management Strategy:** Dominica initiated the development of a National Environmental Management Strategy in 2000 under the St. George's Declaration of Principles for Environmental Sustainability in the OECS (Saint George's Declaration) which was signed by the Government of the Commonwealth of Dominica in April 2001. However, the National Environmental Management Strategy is still incomplete.

THREATS, ROOT CAUSES AND IMPACTS

66. The main threats to ecosystem sustainability in Dominica are habitat fragmentation and land use change, invasive species, climate change and natural disasters, inadequate management of natural resource and inconsistent application of laws and policies.

67. Land degradation is an issue of concern for Dominica particularly due to its steep slopes, small landmass size and the integral link between land-based and marine resources that are strategic assets, particularly to the country's economy and tourism product. The clearance of natural forests in environmentally fragile areas (steep slopes within high rainfall zones) and their replacement with intensive agricultural cultivation, and in some areas, by housing, roads and other infrastructure, which historically was concentrated in lowland areas, is now extending into the highland areas of Morne Trois Pitons and other terrestrial protected areas. This development pattern of increased settlement, agriculture and grazing activities in the upland landscapes surrounding MTPNP and other terrestrial protected areas, particularly in the absence of any officially designated and managed buffer zones, has the potential to greatly increase forest clearance and the degradation of soil and water services in what should be buffer zone areas, and to drive illegal settlements and increased demand for wild plants and animals within PA boundaries.

68. At present, the core area of Morne Trois Pitons National Park is not subject to severe anthropogenic pressures, apart from some direct impacts due to harvesting of wood resources and hunting, and indirect impacts from the spread of invasive species. However, increased unsustainable land uses on lands surrounding its boundaries both threaten upslope resources (including within the National Park boundaries) as well as downslope resources due to increased soil erosion and pesticide use.

69. Reefs and marine resources in Dominica are threatened primarily by human activities, and the effects of climate change as well as invasive species. Human activities include those from coastal development, sediment and pollution, marine based sources of pollution and overfishing. The Reefs at Risk Index (Burke and Maidens 2004)[14] identifies the most significant threat to most reefs in the Caribbean being fishing pressures (unsustainable harvesting), seconded by the effects from sediment and pollution from inland sources as well as the effects of coastal development.

Habitat fragmentation and land use change

70. Currently no persons live within the core areas of Morne Trois Pitons or other terrestrial PAs, but human populations are increasing in the upland areas around these PAs (in part due to concerns about climate change and the risks of building in coastal areas). Without a properly established buffer zone, settlement and other forms of developed will continue unabated and unplanned in these areas, and it is likely that local communities will begin to encroach on the core areas of the PAs in the future. Squatting is not currently considered to be a major problem in Dominica. However, there are some state lands affected by illegal encroachment and intensive cultivation around the MTPNP in the Brandy area and near Petite Savanne along the southern boundary of the park.

71. Landscapes surrounding PAs in Dominica include many plots of privately owned forests and designated agricultural lands. Privately owned forests are generally not subject to any regulatory frameworks that control land and resource use, and clearance, harvesting, and other forms of ecosystem degradation within these forests are

[14] Burke L and J Maidens (2004) Reefs at Risk in the Caribbean. World Resources Institute, Washington D.C., USA. 84 p.

beginning to impact nearby PAs and their immediate surroundings. Similarly, former banana plantations in areas bordering PAs are now managed as small plots by farmers who tend to be resource-poor and to have a low capacity to invest in soil and water conservation measures or infrastructure to prevent and control pollution, runoff, erosion and landslides. Poorly managed mining and quarrying operations, as well as uncontrolled cattle grazing, particularly on steeply sloping lands, has also caused serious land degradation. Development of housing, roads and other infrastructure also threaten natural forests and water resources. Private land owners in the proposed buffer zone are applying for planning permission to construct homes and business centres in the area. The proposed geothermal project is located in close proximity to the proposed buffer zone in the Roseau Valley area. Health authorities have identified improper placement of septic systems as a significant threat to aquatic ecosystems and safe drinking water. Road and infrastructure construction within and around the boundaries of the MTPNP threatens to fragment habitats and bring more resource users into the fragile environment. In addition, any clearance of forests within PAs for settlement, agriculture, or wood harvesting will increase erosion, sedimentation, downstream flooding, and degradation of aquatic and downstream coastal and marine ecosystems.

72. Clearing of steep slopes for agricultural purposes, as well as overgrazing and poorly managed mining operations, exposes the soil to tropical rainstorms resulting in severe erosion, landslides, loss of valuable topsoil, reduced agricultural productivity, and sedimentation of aquatic habitats, all of which result in the loss of terrestrial, aquatic and marine biodiversity. In addition, expanded agriculture and livestock grazing can contribute to increased nutrient loads that impact aquatic ecosystems. Furthermore, on many farms, harmful chemicals and pesticides are often abused, leading to eutrophication of fragile aquatic ecosystems. Increased sediment, nutrient loads and pollution also have negative impacts further downstream; already in Dominica forest clearance and agriculture/grazing activities have resulted in large quantities of sediment and nutrients reaching coastal and marine environments where they negatively impact coral reefs and sea grass beds that are the feeding grounds for juvenile pelagic and near shore fish species, which are an integral part of the diet for most people in Dominica. Fishery resources face considerable stresses from a number of land-based sources of pollution. In the 1990s, most fishing was carried out within a few hundred meters of the coastline; today, fishermen are forced to fish more than 100 km. from the coastline. Because farmers with small upland plots tend to cultivate all of their land, trees that would otherwise serve as carbon sinks are often removed. Additionally, these small farmers use inappropriate soil clearing techniques (fires or agrochemicals) which cause considerable land degradation as repeated burning predisposes the land to soil erosion and landslides. In addition, the fires frequently get out of control and burn surrounding natural landscapes, resulting in significant loss of biodiversity and habitat.

Invasive and Introduced Species

73. Invasive alien species and pests pose a significant threat to the biodiversity of Dominica. For example, over the last two decades, exotic lemon grass (*Cymobopogon nardus*) has spread widely along Dominica's west coast; this invasive alien species first colonized abandoned agricultural lands, but over time advanced into savannah and grazing lands, then dry scrub woodlands, and eventually into secondary forests. The danger posed by proliferation of lemon grass is its persistence, rapid advancement and replacement of natural vegetation, in particular the dry scrub woodland ecological zone that is the natural habitat of the Dominica's national flower (*Sabinea carinalis*). Areas colonized by lemon grass are subject to increases in soil toxicity that retards the growth of other plant species. In the marine environment, the *Halophilia Stipulaceae, a* sea grass native to the Red Sea now occupies 92% of a bay on the west course. This invasive has no natural predator in this region so it grows unhindered and displaces the native species *Syringodium Filiforme* which supports the growth of juvenile and near shore pelagic.

74. Biodiversity on Dominica is also threatened by the introduction of alien species; one example is the introduction of a Greater Antillean anole *Anolis cristatellus*, which has established itself in Dominica between 1997 and 2002, when Forestry officers' reported a non-native anole in the Canefield area of Dominica. The establishment of *Anolis cristatellus* has succeeded in displacing the native endemic *Anolis oculatus* from a part of the island in less than a

decade. *A. cristatellus*, from Puerto Rico and the Virgin Islands, is a medium-sized solitary generalist and well adapted competitor. In addition to the anolus oculatus, the endangered *I. delicatissima,* native to Dominica, is threatened with extinction across its range in part due to hybridization with the introduced green iguanas, in addition to the threats of habitat destruction and introduction of exotic predators. Once widespread throughout the Lesser Antillean chain of islands in the eastern Caribbean, the Endangered *I. delicatissima* is now thought to be confined to just a few islands and a couple of offshore islets. The whistling frog, *Eleutherodactylus johnstonei*, has been widely introduced within the Lesser Antilles beyond its presumed natural range (e.g., into Anguilla and the Grenadines) and may represent a serious conservation threat to the other whistling frogs by competitive replacement, including the IUCN listed Endangered *Eleutherodactylus amplinympha*. Native to Dominica, it is an arboreal species with a preference for higher elevation rainforests, where the forest becomes a little more open. It has been found in disturbed areas, such as along access roads created to support the hydroelectric project in the MTPNP. The higher elevation montane forests are largely inaccessible and secure due to the rugged topography of the area, but there is some degradation taking place in the south of the island due to small-scale farming and selective logging, which is also impacting the species.

75. **Lionfish** (*Pterois miles* and *P. volitans*) are an invasive species native to the Indo-Pacific originating from the South Pacific which has become established throughout most of the south-eastern U.S. and the Caribbean. It was first documented in Dominica in 2011. This highly invasive species is becoming one of the biggest threats to marine biodiversity as it out-competes commercially important fish species and alters whole reef communities. Lionfish are generalist carnivores that consume more than 56 species of fish and many invertebrate species, with prey up to half the lionfish's body size. Lionfish are known to reduce their fish prey by up to 90% and continue to consume native fishes at unsustainable rates, and has resulted in extensive negative effects on Dominica's fisheries and marine biodiversity. With few known natural predators in the Caribbean, the lionfish poses a major threat to coral reef ecosystems in the region by decreasing the survival of a wide range of native reef species via both predation and competition.

76. **Pathogens:** The threat of chytridiomycosis to amphibian biodiversity throughout the Caribbean region is great. The disease first emerged in the Lesser Antilles in 2002, when a fatal epidemic affecting the mountain chicken frog (*Leptodactylus fallax*) in Dominica was recognised. *Leptodactylus fallax* is known to be highly susceptible to chytridiomycosis and has since decimated the mountain chicken frog population on Dominica. This frog is endemic to the Lesser Antilles and, following the onset of the chytridiomycosis epidemic, has been reclassified as critically endangered by IUCN. The smaller whistling frogs, which do not seem to have been affected by chytridiomycosis, include three species of *Eleutherodactylus (E. martinicensis, E. johnstonei* and *E. amplinympha*, the latter endemic to Domincia There are many other amphibian species endemic to the Lesser Antilles and, although the potential effect of chytridiomycosis on these other species is unknown, the disease should be considered an imminent threat to the survival of all endemic amphibians in the Caribbean

Climate change and natural disasters

77. Caribbean Islands are in a state of increased vulnerability to climate change. Increase in average temperature, changes in precipitations patterns, sea level rise and increased hurricane intensity threaten lives, property and livelihoods. These changes will all negatively impact terrestrial (and marine) biodiversity, and result in changes in floristic composition and ecosystem health and integrity. Biodiversity loss will continue to threaten the stability of the ecosystem services on which humans depend. Effects of these natural disasters are magnified when they occur in ecosystems that are already vulnerable due to human factors such as pollution, land clearing, and over-harvesting. Addressing these vulnerabilities and building resilience will ultimately entail improving land management practices, including reducing threats such as unsustainable tourism development, mining, agriculture and climate change. As a small island developing state, Dominica is threatened by the impacts of climate change, including an increase in the frequency of tropical storms; increased sea and air temperatures, and sea level rise.

Although the effects of climate change are evident in Dominica, details on the impacts of climate change on terrestrial and marine ecosystems have yet to be adequately assessed.

78. Climate change has led to increased frequency of destructive hurricanes, increased occurrence of prolonged drought conditions, changes in rainfall patterns and hence shifts in dry and wet seasons, and increased diurnal temperatures. Impacts of these climatic variations are evident in both terrestrial and marine environments. Hurricanes of varying intensity have impacted Dominica frequently over the past fifty years and are considered as root causes of biodiversity loss in Dominica. Hurricanes cause loss of habitat and food supply for wildlife species. Hurricane David in 1979 caused damage to more than 50% of the trees in the southern half of the island, and Hurricane Dean in 2007 resulted in the loss of up to 35% of the forest cover in the eastern part of the island while the 2010 drought impacted forest cover in the lower elevations. Natural disasters caused widespread destruction of natural forest landscapes in Dominica, which in turn lead to the conversion of these areas to agricultural land (areas with toppled trees provide an opportunity to more easily clear land for farming), thereby greatly reducing wildlife habitat and ecological functions such as water retention and erosion control, leading to landslides, soil loss, and reduced water quality.

79. With increased frequency of hurricanes the country can expect to see accelerated land degradation that is precipitated by human-induced activity in vulnerable areas, mainly in the steep interior of the island. Erosion from point-sources (e.g. mines, quarries) and non-point sources (e.g. agricultural runoff) can be expected to increase, along with erosion of coastal areas due to storm surge and battering surf. With increased occurrence of drought events, the potential for forest fires increases and further predispose these areas to land degradation. In addition, he soils found in the central parts of the island and the east coast, including the MTPNP area, are the most susceptible soils to landslides. This includes soils also in the Pont Cassé area immediately to the north of the MTPNP, which when combined with high rainfall (up to 300 inches annually) further increases erosion risk.

80. There are also risks associated with seismic activity: Earthquakes and volcanic activity are possible threats in Dominica and these events can wreak destruction in inhabited areas and lands used for economic output. Catastrophic landslides such as those which occurred in the Carholm/Matthieu area in 1997 (that dammed a tributary of the Layou River) can be significant contributors to increased sediment discharge for extended periods. Active fumaroles are also found on the island. A secondary concern is that of earthquake (and volcanic)-driven tsunamis, which could cause considerable damage and loss of life in low lying, densely populated coastal areas.

81. The reefs of Dominica have already been experiencing the effects of coral bleaching. Bleaching disease and other diseases can cause death of corals, sponges and other marine organisms.

Mismanagement of natural resource

82. Harvesting of wood resources for construction, as well as for charcoal, firewood and fencing for domestic animals, is an existing problem around MTPNP and forested lands throughout Dominica. At present, the levels of harvesting are still relatively minor in the park, but control of this challenge in its early stages will be much more likely to succeed, and will prevent the expansion of such activities into the core area of MTPNP and other terrestrial PAs. Harvesting of wood resources leads to habitat destruction, including habitat of endemic and threatened / endangered species, as well as increased runoff and sedimentation. In Dominica, physical access into many areas is hampered by steep topography, though some areas in Pont Cassé, the Carib Reserve, Picard, Mahaut, Colihaut are threatened by significant land clearing, in response to declining land availability for settlement along the coast.

83. Legal hunting of wildlife for household consumption is carried out within buffer zone areas; illegal hunting is also carried out, to a lesser extent, within the core area of MTP and other terrestrial PAs. At present, hunting pressure is not too high, but increasing settlement of highland areas, including landscapes surrounding PAs, may potentially lead to unsustainable levels of hunting. Hunting has the potential to reduce the populations of such species as Agouti, Crayfish, and Rammier (red-necked pigeon), with potential impacts on other species as well through

alterations to ecological functioning and habitat niches.

84. Marine and aquatic biodiversity in Dominica is also threatened by negative impacts of ghost fishing, inappropriate fishing gear such as traps with inappropriate mesh size, and heavy reliance on biodiversity resources (such as fish stocks) due to high levels of poverty. Decline in inshore fishing due to land based sources of pollution, increased pressure on populations, and lack of adequate time to allow for the natural replenishment of coral reef species. Anecdotal evidence suggests that the species used for livelihood and dietary support are diminishing. There is an increase in offshore fishing of large pelagics (Dolphin, Yellow fin Tuna, Skip Jacks and Blue Marlin) in the waters around Dominica.

85. The aforementioned management challenges can be adequately fared if the several pieces of draft legislations were enacted and enforced; this is a management challenge at the institutional and systemic level.

86. The large influx of visitors from cruise ships to Dominica's national parks, particularly in Morne Trois Pitons National Park and easily accessible sites such as Emerald Pool and Trafalgar Falls (outside the park), can threaten these ecosystems if not properly managed and the stress on the sensitive areas is reduced.

LONG TERM SOLUTIONS AND BARRIERS TO ACHIEVEMENT

87. In the absence of this project, it is likely that the integrity of PAs in Dominica, including MTPNP, will continue to decline, possibly to the point where MTPNP loses its world heritage site designation and its economic significance to Dominica. The long term solution envisioned under this project is the effective management of the National Protected Areas System and *in-situ* conservation of biodiversity through innovative Integrated Natural Resource Management (INRM) interventions that reduce conflicts on land use and biodiversity threats by strengthening PA core zones, developing a buffer zone around MTPNP and instituting a management system to support the legal and technical interventions. This management system will include a financial component that fosters prudent and effective management and use of resources generated by the PAs to sustain the structure and operations of the PA estate. The goal is the effective protection of 20% of Dominica's terrestrial resources which are currently under pressure caused by encroachment, agriculture expansion, infrastructure development, deforestation and fires. By replication, the skills and competences developed at MTPNP and the lessons learnt will be used at other PAs including MPAs areas which are facing threats from invasive species, overfishing and land based marine pollution. The major barriers to achieving this long term solution are:

88. **Barrier 1: Absence of clear institutional structures and mandates for natural resource management:** Currently, Dominica does not have a central coordinating body or administrative agency responsible for effective management of a PAS, or biodiversity conservation in general. The DFWNP, which has nominal responsibility for PAs in Dominica, does not maintain a dedicated staff for PA management and instead assigns staff on an ad hoc basis to respond to PA management needs as they develop. One result of this is that coordination with the Ministry of Tourism on the management of ecotourism sites within National Parks is very weak. This weak institutional structure further manifests itself in the loss of revenue from park services. The fees charged and the system of collection is not consistent at all PAs and results in significant loss of resources. Additionally, fluctuation in currency value can pose economic challenge where the cost of tickets/passes is included in cruise passenger travel package cost. This loss of resources is manifested in staff shortage, inadequate site maintenance and a weak or absent monitoring systems for PAs. In addition a lack of a clear mandate, overlapping jurisdiction and limited enforcement allows livelihood efforts to become challenges. Encroachment into PAs in Dominica continues due to the lack of effective surveillance by forest rangers, as well as the inadequate legal and regulatory framework governing PAs, which prevents quick action to address land clearance and squatting, land ownership disputes, and activities such as charcoal production. Weaknesses in the legal framework for PA management are exacerbated by the fact that each of the PAs in Dominica was established under a separate Act or Standing Order, each of which

frequently bears little resemblance to the previous designations. Regulations and enforcement regarding exploitation of wildlife are extremely limited. Effective management of PA units is constrained by the lack of formally adopted PA management plans.

89. Limited involvement and participation of on-site management by the private sector and civil society due to absence of an appropriate institutional structure and mandate, deprive management of much needed human resources and revenue generation strategies that involve private sector. Local communities in the landscapes surrounding Morne Trois Pitons and other PAs have no involvement in priority setting or planning for conservation and sustainable development activities within the PA core areas or buffer zones despite the fact that some lands in the proposed buffer zone are privately owned. Additionally, these areas are the only sources of livelihood for some. This is compounded by the lack of integration between nationally funded initiatives and internationally or donor funded projects. Most foreign funded initiatives require the establishment of a specific type of institutional architecture which is often incompatible with national structures hence when the funding period ends the institution is disbanded leaving no sustainable management or without strengthening of the existing local institution often due to financial shortfall resulting from currency fluctuation.

90. Absence of information sharing and limited knowledge of the biological functions (lifecycle, species interdependence, etc.) of endangered and threatened species as well as ecosystem functions / services, preclude informed priority setting for the use of limited PA resources. PA management is also limited by a lack of financial resources and the failure to generate any economic returns from PA units. Furthermore, there are no legal instruments for the establishment of PAs buffer zones.

91. **Barrier 2: Absence of integrated approaches to PA management**: Several factors constrain efforts to integrate the management of protected landscapes and surrounding territories in Dominica. Current institutional arrangements for natural resource management are highly fragmented. For example, management of forest resources is split between the DFWNP (forest reserves and national parks), the Division of Lands and Surveys (unallocated state lands) and the Physical Planning Division (private forest lands), but there are no formal mechanisms for coordination and very few instances of consultations regarding development activities, regulations or zoning among these agencies. More generally, environmental planning and management issues are handled in a fragmented manner and there are no official coordinating mechanisms among ministries and agencies responsible for the natural environment, which greatly reduces coordinated actions and even information sharing on management of specific sites, watersheds and landscapes (for example, only major developments may require an inter-agency EIA review process). Land management planning processes are sector-driven and do not take into consideration the maintenance of ecosystem services (water, soil productivity, biodiversity, buffers to natural hazards, etc.) that are of benefit to the widest range of stakeholders and the natural environment. While Dominica has an extensive range of environmental laws and regulations, there is no specific legislation to address land degradation in a holistic manner, and regulations to operationalize sustainable land management principles are often not elaborated. Human resource capacity in specialized areas of land management is weak, including for example the capacity to use natural resource economics to integrate the value of ecosystem services into policy and decision-making towards land and resource development options. The MoAF has outreach programs to farmers and communities, but these are directed at crop and livestock production, with little emphasis on sustainable land management practices. More generally, many of the agencies charged with responsibility for environmental matters are understaffed, and lack the necessary tools and budgets to effectively implement community empowerment and training workshops. There is a shortage of and inaccessibility to scientific data on fast growing species that can be encouraged in the buffer zone to support livelihood activities without impacting the forests in the core areas of PAs; similarly, a better understanding of plant pathogens likely to attack important forest species is needed in order to reduce pressures on forests that are already stressed by the effects of climate change and hurricanes. Local residents in areas bordering PAs have limited awareness of the benefits generated by the PAs (ecosystem services such as water provision and soil retention, as well as potential tourism revenues)

or of sustainable land management, agricultural and animal husbandry practices which can mitigate land degradation and reduce pressures on resources within the PAs.

92. Land use planning and land zoning are critical tools in the PA management, however, there is no comprehensive land use plan for Dominica. Under the Physical Planning Act of 2002, the planning authority may prepare, or cause to be prepared a National Physical Development Plan to guide land use planning decisions in the country. In the absence of a national Physical Development Plan, the National Land Use Policy provides direction for issues related to land use planning in the Commonwealth of Dominica and sets the foundation for all land use decisions and describes how best to manage development to improve quality of life for Dominicans, through economic and social development, protecting human health and safety, and conserving the natural environment but its application is site and case specific. There is no provision in the National Land Use Policy for zoning of MPAs, the only reference made to the marine environment is for National Physical Development Plan to make provision for the control of resource extraction that causes major erosion, degradation, or pollution harmful to the health of fisheries, coral reefs, seagrass beds, coastal zones, or beaches.

93. **Barrier 3: Inadequate Policy Instruments to Support Efficient and Effective Financial Management:** There is little coordination among the varied management arrangements and agencies at the various PAs and jurisdiction and management responsibilities are not always clear. What exists is an ineffective financial system that fails to address PA management needs. The PA estate is not financially sustainable; instead it is overly reliant on direct central government funding. The system lacks any framework for cost-effective landscape level approaches. The weak legal structure leaves PAs vulnerable to development projects both within and near their boundaries. Protocols for exchanging information do not exist, and there are deficiencies in implementation even when information is available. This magnifies inconsistencies and commensurate financial challenges. There are no formal policies to facilitate mutually beneficial opportunities between conservation and tourism.

94. The financial sustainability of the PAS is hindered by its limited income sources. The system's financial inadequacies were strongly noted in the Financial Scorecard completed during project preparation. The scorecard and the associated assessment revealed a large gap between existing and needed funding as well as system wide challenges related to strategic financial generation and allocation. PA institutions annually request government budgets commensurate with required conservation tasks, but approvals rarely meet requirements.

95. **Barrier 4: Limited Public Support for PA's and Little Understanding of their Benefits:** Adequate public concern and understanding for PA conservation is a large barrier to achieving necessary financial support. There is limited understanding, particularly amongst key decision- makers, of the social and economic contributions made by the PA estate. For instance, few recognize the financial importance of ecosystem services and/or how much key economic sectors such as tourism depend upon the existence of a vibrant and healthy PA estate. Without greater conservation enthusiasm and understanding by decision-makers, the probability of increased and stable financial support by citizens, businesses, and government entities is limited.

STAKEHOLDER ANALYSIS

96. During the project development workshop, a stakeholder analysis was conducted to determine ownership of the project, the level of buy-in, the anticipated roles of the various stakeholders in the project implementation and to better design the management structure needed to ensure effectiveness of project implementation and the sustainability of the impact. The following table identifies the major categories of stakeholders and the individual organizations within those groups as well as the proposed role(s) of each stakeholder group.

Table 2: Stakeholder analysis

Stakeholder	Overall Roles and Responsibilities	Interest / Role in Project
National Government		
The Ministry of Health and the Environment including the ECU	The Ministry of Health and the Environment will function as the lead implementing agency. The Ministry will coordinate the inputs of government agencies and other stakeholders in strengthening the legal, policy, financial and institutional capacity necessary for the implementation of the project and the establishment of a PA management system.	The ECU will collaborate and interact with private, public and civil society stakeholders and stakeholder organizations, external research organizations and inter-governmental institutions to monitor and report to government and relevant agencies in accordance with the requirements of this project and the relevant Multilateral Environmental Agreements (MEAs)
Ministry of Agriculture and Fisheries, including Forestry, Wildlife and Parks Division, the Agriculture Division, and Agricultural Investment Unit	The Forestry, Wildlife and Parks Division within the Ministry of Agriculture and Forestry (MoAF) will take the leading role in establishing priorities and strategies for improved site-level PA management.	The DFWNP will be responsible for forest management including conservation, sustainable resource use of all Forest Reserves and National Parks in Dominica, as well as soil and water conservation, enforcement of forestry, wildlife and national parks legislation. The ECU will support the Forestry, Wildlife and Parks Division in research and monitoring, public relations, environmental education, institutional capacity building and resources mobilization.
Ministry of Agriculture and Fisheries, Fisheries Division	The Fisheries Division will lead in all activities associated with the improvement of marine environment and resource. The Dominica Marine Reserve Service will support the Fisheries Division in the monitoring and conservation of marine resources to ensure the achievement of the project outputs.	The Fisheries Division will contribute to the updating / strengthening of laws, regulations and policies related to the management of Dominica's marine PAs namely the Soufriere Scott's Head Marine Reserve (SSMR) the Cabrits Marine Reserve (CMR) and the proposed Salisbury Marine Reserve (SMR).
SSMR LAMA	The LAMA serves as the community based manager for SSMR	Improving the LAMAs capacities and coordinating its activities with the terrestrial PAs
Ministry of Finance	The Ministry of Finance has a National Authorizing Officer who signs on behalf of government for all external funding. Internal fund (from the consolidated fund) is also managed via Ministry of Finance.	The Ministry of Finance will therefore authorize the use of funds by this project. The ministry will also play a key role in the development of additional revenue mechanisms for the PAs
Ministry of Housing, Lands and Water Resource Management	The Department of Lands and Surveys will be responsible for demarcation of boundaries and delimitation of zones while the Department of Housing will regulate housing development in the buffer zone.	Responsible for implementing the buffer zones identified as part of this Project and for regulating land uses within these areas based on the Project outcomes
Ministry of Justice, Immigration and National Security	This ministry is responsible for the drafting and enforcement of all legislations governing Dominica including environmental protection.	The ministry will be responsible for the establishing the legal status of PAs and the development of comprehensive legislation needed for PA system (PAS).
Ministry of Tourism	The Ministry of Tourism will guide the implementation of project activities within Morne Trois Pitons, in particular for the tourism sites within the park.	The Ministry of Tourism sees PAs as a vital component of the country's tourism strategy

Stakeholder	Overall Roles and Responsibilities	Interest / Role in Project
Physical Planning	In the buffer zone outside of Morne Trois Pitons, the Division of Lands and Surveys within MAF, together with the Physical Planning Division within MENRPPF, will both play important roles in developing planning, mapping, and regulatory strategies for the PA buffer zone.	Responsibility for regulating land uses within the buffer zone
Bureau of Gender Affairs	Works with Dominica National Council of Woman to address gender equity.	Will play a key role with DNCW in identifying, ensuring and monitoring women's participation in Project activities
DOWASCO	DOWASCO is responsible for the development of water resource in Dominica, the agency will therefore manage the water resource associated with Morne Trois Piton through research, data collection, projection and maintenance and development of infrastructure within the park and buffer zone.	Will play a key role in protecting water sources in buffer zones and in development of PAS mechanisms
DOMLEC	Hydroelectric generation from streams emanating from Morne Trois Piton is the business of DOMLEC.	The agency will be jointly responsible for site protection and development
NGOs/CBOs	Relevant civil society partners that will participate in the project implementation process include Dominica Organic Agriculture Movement, National Youth Council and National Association of Youth in Agriculture, Community Councils and Community Improvement Groups, Eco-balance – Biodiversity Center for Learning and Training, Bellevue Chopin Organic Farmers, Giraudel Women's Group.	These organizations will participate in the co-management of the buffer zone of the PAs, in monitoring and evaluation and the implementation of livelihood initiatives, will also play a key role in the Project's community projects
UNESCO	UNESCO will provide support to policy development for the buffer zone. Additionally, the agency will provide financial and technical support to eligible community groups operating in the buffer zone of Morne Trois Piton.	UNESCO will also provide technical support to the development of the PAS plan.
Private Land Owners	Private land owners will become part of the management structure (the co-management structure that will evolve) and will promote low impact activities by visitors as well as advocating for the conservation and sustainable use of the resource	Play a role in determining land uses and development practices in the buffer zones

CONCLUSIONS OF THE BASELINE ANALYSIS

97. Under the "business as usual" scenario, Dominica faces the possibility of little advancement in the realization of an effectively managed and financially sustainable PA estate. If not addressed in a significant way, gaps in PA financing and management will continue to threaten the integrity of the PAs, limiting the operational effectiveness (i.e., its ability to provide for biodiversity conservation, ecosystem support, and its ability to support national development goals). The proposed project is expected to establish an enabling environment through legal, institutional, and operational reforms supporting PA management effectiveness and financial sustainability. Without the Global Environment Facility (GEF) intervention, insufficient conservation efforts will continue due

to the fractured nature of the current PA network and the lack of a systematic approach to conservation. Additionally, without GEF intervention, PAs will remain financially unsustainable, relying on insufficient and uncertain funding and will continue to operate in an environment where revenue generation options are severely limited for the majority of the sites despite their significant contributions in supporting the various pillars of national development.

98. Even with the existence of a cohesive PAS, the current problematic situation identified above will remain. Although all management efforts of Dominica's national system should be aligned, administrative structures and processes do not fully support the operationalization of this key tool. PAs sustainability continues to be negatively impacted by current practices of "silo" management. An evaluation of the PA estate indicates the absence of crucial national legal and institutional elements. These deficiencies limit the success of any national attempt at advancing the PAS recommendations, and manage to maintain the barriers to effective and efficient management of the PAS. A lack of coordination among PA management authorities and institutions has resulted in what now can only be described as ad hoc actions resulting in ineffectual management with very little realized benefits. Without GEF increment it is expected that the management of PAS sites will continue following the status quo, which has contributed to its deficiency to date and reduced its ability of realizing true financial and ecological sustainability.

99. As threats to biodiversity continue to grow due to increased demands on Dominica's natural resource base as a means of counteracting national economic shortfalls, the capacity of managers to address these threats is expected to remain the same as management entities are unable to capitalize on alternative financing options to support human and institutional capacity building. The assessment of the PAs estate current financial status using UNDPs Financial Sustainability Scorecard indicates varying levels of understaffing in most PAs.

Institutional frameworks

100. Institutional arrangements for development and management of a system of PAs come from legal and policy frameworks, both of which are lacking in Dominica. Management of sites and systems of PAs has added complexity due to the obligations under the relevant multilateral environmental agreements as well as donor requirements and regional commitments. MEAs and donor-funded projects require increasing amounts of reporting and measurement of achievements, both site specific and system-wide, such as was required under the CBD PoWPA. The overarching institutional framework for PA management must therefore be strong enough to deal with these various demands, ideally without the existing budgetary constraints and limited institutional capacity.

101. However, there is no institutional coordinating mechanism for PA management. In addition to the lack of integrated legislation, the management of these areas is shared by a wide array of agencies. Existing legislation does not support a coordinating mechanism for national parks and PAs management in Dominica, and does in no way provide the needed integrated management. The DFWNP is responsible for forestry, forest, watershed and wildlife conservation, forest reserves, national parks and other PAs in Dominica. Under this Division falls the NPU, responsible for management of recreation/nature sites both within and outside the country's three (3) national parks. Site-specific co-management arrangements exist between the NPU with the Ministry of Tourism, primarily due to lack of adequate available dedicated staff within the NPU and lack of financial resources. For example, the Ministry of Tourism provides site interpretive staff and pays for some infrastructure costs at nature / recreation sites, including at those outside the park that still fall under the responsibility of the NPU but for which NPU lacks adequate financial resources. Though co-management arrangements are evolving at some sites, an agreed mechanism to be used for PAs development and management across the system has not been established.

102. In addition to a lack of an integrated approach and coordinating mechanism for managing national parks and PAs, numerous agencies have responsibility for management of the landscape surrounding PAs, including potential buffer zones being addressed through this project. These agencies include primarily, but are not limited to, the Divisions for Physical Planning, Agriculture, and Lands & Surveys. For both PAs and surrounding landscapes

mentioned above, the ministries and divisions must also work in conjunction with the ECU, which is responsible for developing action plans and targets, submitting relevant reporting, and ensuring that Dominica meets its obligations to multiple MEAs, including but not limited to CBD, UNFCCC and the UNCCD. There is also currently no coordinating inter-institutional committee or agency with responsibility for ensuring harmonization of the landscape level approaches and activities for PAs and their buffer zones, ensuring integrated planning, coordinated budgetary allocations and/or the development of MOUs between agencies with joint responsibility for activity/project implementation. The *Draft* Climate Change, Environment and Natural Resource Management Bill 2013 includes the establishment of a Council on Environment, Climate Change and Development, with an inter-agency composition and responsibilities for implementation of international and regional environmental treaties and agreements. This proposed Council on Environment, Climate Change and Development will not focus *per se* on PAs and their buffer zones, though aspects of natural resource management and biodiversity will be incorporated into its responsibilities under the treaties within its mandate.

Protected area financial sustainability

103. The recently completed UNDP Financial Sustainability Scorecard indicates that the combined PA estate operates below mission critical levels (i.e., finances currently injected in the system are inadequate to completely support the basic required structures for effective PA management). Although the country still morally and theoretically supports biodiversity conservation and management, the current economic positioning of the GoCD does not allow for immediate increases in government funding to the system. This in itself is disturbing news for a system whose guiding policy identifies the key role of government as providing core funding to facilitate best practice management.

Management capacity

104. There is currently inadequate institutional capacity for the design, development and management of a system of PAs.[15] This is reflected in for example, inadequate levels of manpower and financial resources as well as insufficient technical expertise. There is a heavy burden for technical assistance on related agencies, in particular, the DFWNP and the Fisheries Division. Such demands place further pressure on the already limited institutional capacities of these agencies. The Capacity Scorecard indicates low scores in the ability to implement. Respondents acknowledged that there are largely insufficient quantities of skills to guarantee effective planning and management. Human resources are poorly qualified and unmotivated and PA institutions typically are severely underfunded and have no capacity to mobilize sufficient resources. There are some mechanisms in place to facilitate the appropriate systems of training, mentoring, and learning to maintain a continuous flow of new staff. However the mechanisms that do exist are insufficiently developed and therefore are unable to provide the full range of skills needed.

Protected area development efforts

105. Dominica has initiated several programs in the past decade to strengthen and expand its system of PAs. From 2005-2011, the country participated in the project OECS OPAAL, a regional initiative aimed at coordinating, complimenting and integrating PA management in the Eastern Caribbean region. In Dominica, the project sought to promote biodiversity conservation, remove barriers to effective management of PAs, increase the participation of the private sector and NGOs in PA management, and provide environmentally sustainable economic opportunities for nearby communities. Unfortunately, the project design did not fit the local institutional structure, this along with human resource challenges prevented Dominica from making significant progress towards achieving the goals of the OPAAL project. The MoAF (with EU funding of approx. US$6 million) is implementing

[15] Gardner, Lloyd. 2006.

a program to rehabilitate trails and facilities within Dominica's national parks and various ecotourism sites, notably including the WNT. The trail extending the length of the island from north to south and traverse the island's various climatic, vegetative, topographic, and social communities, including Morne Trois Pitons and other PAs. This project is intended to increase ecotourism revenues while also reducing the adverse impacts of uncontrolled tourism related activities in Dominica's PAs. Unfortunately, the trail is poorly managed and there is a shortage of staff to effectively manage the full length of the trail. As a result the full economic benefit of the trail is not experienced. The Ministry has an on-going public awareness campaigns on PAs, including community events that bring schoolchildren to various PAs and educate them on the importance of the area in the protection and management of biodiversity. The Ministry also implements some basic management activities at PAs, such as trail maintenance, education, surveillance, and removal of invasive alien species (funding for this is reflected in the budget for wildlife and forests in the next paragraph). Other spending by the GoCD related to PAs includes approximately US$110,000 for coordination and policy development in support of environmental conservation, and US$89,000 to support ecotourism, during the period of the proposed project. In addition to these on-going government budget allocations, Dominica is implementing the West Coast Water Project, a $28.3 million project aimed at improving the management and distribution of Dominica's water resources. As part of this project, US6.29 million is slated for an upgrade of Water Area 1, for which MTPNP is the primary catchment area.

106. In the productive landscape, including areas bordering MTPNP and other PAs, Dominica has implemented a number of programs to improve the sustainability of development and resource use. From 2006 – 2011, Dominica participated in the GEF-funded Integrated Watershed and Coastal Areas Management (IWCAM) project, which addressed: 1) diminishing freshwater supplies; 2) degraded freshwater and coastal water quality; 3) inappropriate land use; and 4) hygiene and sanitation. The overall objective of the project was to strengthen the commitment and capacity of the participating countries to implement an integrated approach to the management of watersheds and coastal areas; based on the lessons learned through IWCAM, Dominica is currently developing a pilot project for the management of the Roseau River watershed. Another important achievement was the development of an INRM approach piloted under the UNDP-GEF Sustainable Land Management project that ended in 2012. Among other activities, that project selected 10 communities that were particularly vulnerable to land degradation impacts (landslides; sea level rise; etc.) where it trained technicians to create community resource maps, and then worked with the communities to use the maps to prioritize development and resource use plans, minimize or prevent land degradation problems, and prepare for potential climate change impacts. The proposed project also will build on outcomes from the GEF-funded Special Program on Adaptation to Climate Change (SPACC) (2007-2011), which helped Dominica, Saint Lucia and St. Vincent and the Grenadines to implement pilot adaptation measures addressing the impacts of climate change on the natural resource base of the region, focused on biodiversity and land degradation along coastal and near-coastal areas. Despite these and other programs, changing trends in land use continue to pose serious threats to Dominica's natural resources, and consequently the country. With support from the Caribbean Development Bank, Dominica began the preparation of a National Physical Development Plan and National Land Use Policy in early 2014. The Plan and Policy are expected to address integrated land use planning and watershed management; hazard reduction and climate change adaptation; and the protection of prime agricultural lands. At the regulatory level, in response to the devastating impacts of mining activities on marine ecosystems and coastal livelihoods, the Government ceased granting new licenses to land mining operations as of the end of 2011 and is actively monitoring programs to evaluate mitigation effects. Overall, the Government of Dominica also expects to spend approximately US$4.4 million on the management of forests and wildlife, and US$297,000 on planning and policy development activities for the agriculture sector during the period of this proposed project. In addition to these on-going government budget allocations, another relevant baseline program is the World Bank funded Strategic Program for Climate Resilience (SPCR; 2014-2017), which includes: 1) Promotion of Food Security through Climate Resilient Agricultural/Fisheries Development; 2) Comprehensive Risk Management Framework and Sustainable Climate Change Financing; and 3) Enhancing Ecosystem/Infrastructure Resilience and Promotion of Sustainable Human Settlement. Other relevant programs

include the EU-funded Banana Accompanying Measures (BAM) program, a €15.27 million project aimed at helping Dominica to reorient from banana production to other productive agricultural activities, as well as various community-based groups implementing sustainable land management projects with support from the GEF Small Grants Program.

PART II: Strategy

Project rationale and GEF Focal area strategy

107. This project seeks to improve the sustainability of PAs in Dominica using the MTPNP as a model for replication across other PAs in Dominica. The project therefore fits GEF Biodiversity Strategic Objective 1 - Improve Sustainability of Protected Area Systems, and specifically the BD1 Focal area Outcome 1.1 "Improved management effectiveness of existing and new protected areas" and Strategic Objective 2 – Mainstreaming Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors, specifically BD 2 Focal area Outcome 2.1 "Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation." The project addresses both local and systemic challenges specific to MTPNP and generally to all PAs in the Commonwealth of Dominica. The project will establish a buffer zone around Dominica's World heritage Site MTPNP and develop a management plan for the MTPNP inclusive of the buffer zone. Site specific management plans will be developed for all PAs in Dominica with supporting staff. The management and operations of these PAs will be harmonized and coordinated giving rise to a National PA management system. This PA management system will improve management effectiveness by sharing responsibility among PA staff, increase revenue generation and collection through rationalization of site fees and adherence to the PA business plan.

108. The project will reduce threats to biodiversity caused by encroachment, habitat destruction and change of land use (from forest to agriculture, housing, roads) through a livelihood initiative that seeks to create productive landscapes. Control measures will be implemented in the buffer zone to regulate land use further supporting biodiversity conservation while increasing stewardship and revenue generation and building the adaptive capacity of the communities to the impacts of Climate Change. The conservation effort by the communities adjacent to the PA will reduce land degradation, coastal sedimentation and ultimately improve the health of the coral reefs that protect the coastal communities.

109. The demarcation and legal establishment of the buffer zone around MTPNP will significantly improve the management of the park and set the stage for the protection of all other PAs in Dominica. It will improve management of PAs by including civil society participation in PA management and create productive landscapes and seascapes that will enhance economic growth development in Dominica.

Table 3: Project Contribution to GEF BD Indicators

GEF V Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Project Contribution To Focal Area Objective
BD-1	**Outcome 1.1:** Improved management effectiveness of existing and new Pas	**Output 1:** New protected area (0) and coverage (6,752 hectares) of unprotected ecosystems.	METT scores for Morne Trois Piton improve from 59 to 75. Overall PA management scores would improve proportionately. PA area coverage increase by 1,500 ha
BD-2	**Outcome 2.1:** Increase in sustainably managed landscapes	**Output 2.2:** National and sub-national land-use plans (4) that	Improved management of PA landscape and seascape providing sustainable

	and seascapes that integrate biodiversity conservation.	incorporate biodiversity and ecosystem services valuation.	livelihoods for more Dominicans

PROJECT RATIONALE AND POLICY CONFORMITY

Alternative to Project Strategy

110. More than 60% of the island of Dominica is pristine forest; 20% of which is classified as protected all with no comprehensive management plan. Within the MoAF, the DFWNP is responsible for the management and sustainable resource use of all Forest Reserves and National Parks. The Forest Management Section of the DFWNP is responsible for providing technical assistance (through Agriculture Extension Officers), regulatory services and the policy framework to guide development of agriculture. The Ministry of Lands, Housing Settlement and Water Resource Management includes the Division of Lands and Surveys, which manages all Unallocated State Lands, carries out surveying/mapping, and maintains records of land sales and mining permits. The Dominica Water and Sewerage Company (DOWASCO) shares responsibility with the DFWNP to protect watersheds. This institutional structure is piecemeal and limits the participation of stakeholders, discourages the integrated management of parks and eco-tourism sites, and is economically unsustainable without capital investment from the state. This project will improving management effectiveness at key sites, strengthen the institutional, policy and regulatory framework for PAs in Dominica while improving their overall financial structure.

111. **GEF** investment will support the development, institutionalization and management of a buffer zone around MTPNP in the form of a productive landscape thus creating livelihood opportunities for persons currently eking out an existence from the forest (PA). This effort will increase Dominica's PA by > 530 ha. The project will foster the integration of existing small units into a cohesive PA management system with appropriate capacity, tools and financial instruments to ensure sustainability. Through a structured financial management plan, the project will enable PAs to attract more visitors, generate more funds and effectively manage these funds to deliver a financially sustainable PA system over four years. Without this project the MTPNP will continue to operate without a buffer zone losing ground to encroaching developers thus threatening its World Heritage Status.

112. This project will build on the volume of work done on Dominica's PAs including the OPAAL, The National Parks Consortium and the SPACC Project guided by the plethora of draft and approved legislations. It will foster the development of an institutional coordinating framework to manage PAs (terrestrial and marine) in Dominica that does not currently exist. A legislative review will address lack of legal clarity regarding PAs. Inconsistencies occur between the *Fisheries Act* (Cap. 61:60), the *Forestry and Wildlife Act* (Cap 60:02), and the *National Parks and Protected Areas Act* (16 of 1975), with no clear management authority having been created for the administration and management of all national parks and PAs.

113. The establishment of the buffer zone around the MTPNP will give definition to the world heritage site, improve stakeholder involvement in management, convert illegal settlements into productive landscapes and support the conservation of Dominica's rich biodiversity. In so doing, the project will build upon previous global, regional and local efforts to address PAs and biodiversity conservation including GEF funded NBSAP and Fifth National Report, the UNCCD ten year strategy for soil and biosphere conservation, and the UNFCCC forest conservation effort (REDD); other international agencies like TNC, FAO, and USAID. Regional efforts include the work of Caribbean Community Climate Change Centre (CCCCC), CARICOM and the OECS

114. Building upon the lessons learnt and the capacity developed from the implementation of environmental projects over the past decade, this proposed project will add significant value to Dominica's conservation effort by developing mechanisms and models for integrating conservation and livelihoods guided by a modified legal and regulatory framework. The project will serve as a bridge to link the outcomes of inter alia the NBSAP, OPAAL,

CPACC, the 2011 Fisheries Census and the National Parks Consortium by implementing key recommendations that are in line with the project objectives.

Protected Area Site Specific Information

115. **Morne Trois Piton National Park** (MTPNP) was proposed as a forest reserve in 1952 but later designated as a National Park under the National Parks ND Protected Areas Act # 16 of 1975. MTPNP includes large highly scenic tracts of the most extensive almost undisturbed tropical forest in the Lesser Antilles and the headwaters of most of the major streams and rivers in the southern half of the island. These support a high level of biodiversity. The Park lies within a Conservation International- designated Conservation Hotspot, a WWF/IUCN Centre of Plant Diversity and a Bird Life-designated Endemic Bird Area.

116. MTPNP is located 13 km east of the town of Roseau in the highlands of south-central Dominica and it is the basaltic spike-like remains of a former volcano rising to approximately 1,300 m, within 8 km of the sea. The landscape is characterized by volcanic piles with precipitous slopes, and deeply incised valleys (*glacis* slopes). There is also a fumarole known as Valley of Desolation (or Grand Soufriere), with fumaroles, hot springs, mud pots, sulphur vents and the Boiling Lake, which is the world's second largest of its kind. The valley is a large amphitheatre surrounded by mountains and consisting of at least three separate craters where steam vents, small ponds, and hot springs bubble up through the ground. The Boiling Lake is surrounded by cliffs and is almost always covered by clouds of steam. The Valley of Desolation drains into the Pointe Mulatre River, which flows into the Atlantic.

117. Other outstanding features in the area include the Emerald Pool, fed by the Middleham Falls; Stinking Hole, a lava tube in the middle of the forest; and the Boeri and Freshwater lakes. The Freshwater Lake is the largest and second deepest of Dominica's four freshwater lakes. The Boeri Lake is the second largest in Dominica, and is located in the crater of an extinct volcano. Both lakes are separated from each other by Morne Macaque (1,221 m) and vary in depth with the season. These lakes are believed to have originated some 25,000-30,000 years ago[16].

118. Five natural vegetation zones are recognized within the area namely: 1) Elfin/cloud forest, which occurs at the highest elevations, above 914 m with vegetation types consist of mosses, ferns, shrubs and stunted trees covered by lichens 2) Montane thicket, which is transitional between elfin and montane forests and dominated by spindly trees the most common of which is the Podocarpus coriaceus, the island's only native conifer, 3) Montane rainforest, which grows above 610m, is frequently in cloud cover or fog. The species composition here is similar to that of mature rainforest, yet much reduced in stature. Non-vascular epiphytes cover most of the montane rainforest plants, 4) Mature rainforest, which grows below 460m contains the most luxuriant growth, 5) Scrub wood land and savannah type vegetation.

119. The park is home to at least 7 species of mammals, 50 bird species include imperial Amazon and red-necked Amazon parrots, 12 reptile and amphibian species and 12 crustacean species. Apart from the introduced opossum and agouti, there are no terrestrial mammals in the area.

120. **The Cabrits National Park** (CNP) of which the marine component is an integral part, was officially designated a national park in 1987 under the "National Parks & Protected Areas Act" 1975. Its boundaries are defined in the National Parks and Protected Areas Act No. 16 of 1975 amended by SRO 54 of 1986. Since its designation, there has been no effective management of the Park or its resources due to conflict of jurisdiction between the Forestry and Fisheries Divisions for management of the marine resources and a lack of human and financial resources to support research and development of the marine section of the national park. The Fisheries Act 61:60 (1987) makes provisions for the establishment and management of marine reserve while the National Parks and Protected Areas Act of 1976 gives jurisdiction to the Forestry and National Parks for the establishment and management of all

[16] http://whc.unesco.org/en/list/814

national parks.

121. The CNP is located along the northwestern coast of Dominica approximately 2 kilometer from the town of Portsmouth. The peninsular is comprised of twin peaks of extinct volcanoes- the east Cabrits rising to a height of 485 feet (140m) and the west Cabrits rising to 560 feet (171m). An extensive swamp, 35 ha (89 acres) is located east of the Cabrits. Immediately north of the Cabrits peninsula is Douglas Bay. The marine section consists of 1053.2 acres (421 hectares) of sea, located between Prince Rupert's Bay and Toucarie Bay.

122. Dry scrub woodland and a freshwater swamp dominate the immediate terrestrial environment of the CNP. The Cabrits swamp consists of 35 ha (89 acres) along the eastern side of the Cabrits peninsula. It is considered to be one of the most important wetlands areas of Dominica "for its assemblage of swamp plants and as a notable migration haunt/ wintering area for herons, egrets, ducks and waders"[17]. The swamp vegetation is dominated by sedges- Cladium jamaicensis, Eleocharis species- *mutatis* and *instincta* and clumps of swamp fern- Acrosticum aureum and five species of crabs. The dry scrub woodland is considered one of the most extensive and best examples of this type of forest in Dominica. It covers the east and west Cabrits and is dominated by a variety of deciduous tree species and has one of the highest densities of reptiles recorded anywhere in the world with an abundance of Anolis, tree lizards, ground lizards, mabouya/ skinks, iguanas, geckos, boa constrictor and Alsophis snakes". The area is home to the most important populations of butterflies including the endemic Godman's leaf and the endangered endemic Dominican Snout butterfly. The Cabrits has a wide coastal shelf with large expanses of coral reef on gradual slopes from depths of 3- 25 m reaching up to and exceeding depths of 30 m.[18]

123. Sea-grass beds lie towards the shoreline in the south and central areas of Douglas Bay and in the southern half of Toucarie Bay. The marine park also serves as a breeding and feeding ground for a number of seabird species found in the area. Fishing is a family tradition in Cabrits and constitutes a significant source of subsistence to many families living along the coast who practice beach seining and pot fishing for inshore pelagics and long lining and trolling for coastal pelagics.

124. The **Morne Diablotin National Park** (MDNP) is located at 15° 31′N and 61° 24′W in the North west portion of Dominica falling within the parishes of St. John, St. Andrew, St Peter and St. Joseph. The Park was officially created in January 2000. It is centred on the island's highest peak 4,747 ft (1 422 m). It comprises 8,425 acres of some of the finest and least disturbed rainforest in the insular Caribbean with its elfin woodland and montane thicket that are of regional significance. Several peaks occur within the Park and a deep ravine, the Picard Gorge, runs through the north-west section. Much of the land is steep or prone to landslides yet the Park has tremendous value as a carbon sink and watershed protection including portions of 12 rivers, four of which provide water to domestic, agricultural and industrial users in the north of the island. It is also host to two species of highly endangered parrots the Sisserou or Imperial Parrot, *Amazona imperialis* and the Jaco or red-necked Parrot, *Amazona arausiaca,* and a number of other rare or endemic species including the endemic plants, *Chromolaena impetiolaris* and *Chromolaena macrodon* which are only known from Morne Diablotin.

125. The park has the most sequence of natural moist forest types that occur on the mountainous islands in the Eastern Caribbean. Standardized vegetation plots and census data has ranked this site as having the highest diversity of flora and fauna in Dominica. The entire area of the MDNP is covered with vegetation and there are no settlements in this area. This area is a true representation of the possible forest species occurring in Dominica, with an average of 60 tree species with girth at dbh 1.5 m above ground greater than 10 cm /1000 m^2 [19]. A large number of species, which is restricted to Dominica or the Lesser Antilles, occur in the park, including eleven (11) species of bird, four (4) species of mammals and six (6) species of reptile and amphibians. Though the data on the flora of the park is

[17] Evans
[18] Beard, J.S. The Natural Vegetation of the Windward and Leeward Islands. Clarendon Press (1949)
[19] Varty N, R. Charles, G. Mendelssohn and D. Williams. Management and Development Plan, 1993-2003, Proposed Morne Diablotin National Park, Commonwealth of Dominica. Forestry and Wildlife Division, Dominica (1993)

incomplete, four (4) of the six (6) endemic plant species recorded for Dominica are found in the park.

126. MDNP has a Visitor Centre with a parking area. There is a short loop trail and view point over the Picard Gorge that runs from the Visitor Centre. Non-resident visitors pay a small entrance fee to the Park. No carrying capacity was established because the Park is not frequented by cruise ship visitors. As a result no limit on the number of visitors per day has been set.

127. **The "Soufriere Scott's Head Marine Reserve**" SSMR, was established to protect the marine resources and to manage multiple users. It was the first marine reserve established in Dominica. It contains both aquatic and terrestrial ecosystems. It supports coastal and pelagic fishery, some of the best snorkeling and scuba diving sites in the world, excellent whale watching opportunities and beaches at Soufriere and Scott's Head for recreational swimming. This marine park was designed to cater for the compatible trends in development without sacrificing the livelihood of the people and ensuring the conservation of a resource, which is unique; as such, the area is divided into priority areas to reduce conflicts that may arise from multiple uses, to preserve the tradition of fishing in the area and avoid the possible threats of employment displacement[20]. Major zones include: Fishing Priority Area – part of the marine reserve set aside for fishing purposes only; **Recreation Areas** (Scuba diving, snorkeling and swimming zones) – these areas permit the various activities to take place without threats to fishing boats activities; **Fish Nursery Area –** This is an expanse of marine space set aside for juvenile fish species to grow undisturbed. The area is designated where the presence of juvenile fish has been known to aggregate. Each of these areas are clearly demarcated with buoys in order to ensure the rights of the respective users within set perimeters simultaneously allowing for different activities to take place in the reserve with the minimum of user conflicts. The diverse nature of the fishing resources represents both demersal and pelagic species. A few naturally occurring wonders such as hot sulphur vents bubble out of the ocean floor with steep sided under slopes which is part of the crater. The slopes are covered with arrays of coral colonies and other flora and fauna all in a single bay with a replica of an old volcanic crater.

128. A LAMA has been established and empowered under Part III Section 22 (1) and Part II Section 18 and 19 of the Fisheries Act, No. 11 of 1987 to manage the development of the Marine Reserve as a Fishing Priority Area within the reserve.

129. The LAMA is made up of representatives of the community and Central Government including: Fishermen's organisations of Pointe Michel, Soufriere and Scott's Head, Village Councils of Pointe Michel, Soufriere and Scott's Head, Community Scout Troops of Soufriere, Hospitality Industry entities of Pointe Michel, Soufriere and Scott's Head, Community groups (Scott's Head Improvement Committee), Dominica Water Sports Association, the Fisheries Division and the Dominica Police Service (Marine Section / Coast Guard)

130. This area is the most popular diving and snorkeling site in Dominica; the Dominica Water sports Association indicated that 2500- 3000 divers visit Dominica yearly. Ninety- five percent (95%) of these divers dive within this area. Frequent sightings of Whale and Dolphins make it a prime area for whale and dolphin watching tours.

131. **Forest Reserves:** The Commonwealth of Dominica legislated the protection of its natural forest through a series of legislative Acts and Ordinances. Under the Forest Ordinance of 1958, restrictions were placed on activities such as forest product extraction and hunting within the reserves, however, controlled felling of trees is permitted in Forest reserves. Established in 1951, 410 ha (1013 acres) (4.1 km2) of forest dominated by rainforest with an abundance of gommier/ chatannye' *Dacryodes excelsa/Sloanea sp. Association* was declared as *The Central Forest Reserve.* In 1977 another 8814 ha (21745 acres)/ (54.75 km2) of forest in the north (Northern Forest Reserve) was established principally as a watershed conservation area. It contains The MDNP was carved out of the *Northern Forest reserve.*

[20] Lawrence , N., A. Magloire and H. Giuste. Undated. *Soufriere / Scotts Head Marine Reserve Management Plan. 40 pp. Unpubl.*

Nature Sites

132. The GoCD has designated thirteen (13) sites as ecotourism sites. The designation allows the NPU to manage these sites for revenue purposes. Some of these sites are located within the PA estate and some are on private or community property.

133. Within the MTNP WHS there are four designated ecotourism sites: Boiling Lake Freshwater Lake, Boeri Lake, Middleham Falls and Morne Trois Pitons Trail. Three additional sites are located in CNP and MDNP. The other five (5) sites are located outside of gazetted PAs.

134. Where the sites are outside of the gazetted PAs there are no formal management agreements for the NPU, and activities are managed on an ad hoc basis. For all intents and purposes these sites are considered part of the NPs though management of these sites is also not accompanied by dedicated funding, staffing or resource management.

135. The two most visited sites, Emerald Pool and Trafalgar Falls, are located just outside of MTPNP boundaries. These sites provide 70% of the revenue generated by the PA estate.

136. There is no formal visitor or resource management plans at any of the thirteen (13) sites, including those within PAs, and all decisions are made on an ad hoc basis. This has led to inconsistent investment planning decisions and resource degradation.

Buffer Zones

137. In 2011 the Revised Management plan recommended the following proposed buffer zone for the MTPNP WHS consisting of the establishment of a 305m buffer in the northern area of the park in the Pont Casse' areas where approved building development has been granted to land owners. In other areas of the park a 200 m buffer was recommended. These recommendations will be reviewed during project implementation to determine their adequacy and fit to purpose. The project outcome may therefore differ from the 2011 recommendations.

138. With respect to the Morne Diablotin National park, the proposed buffer zone for the park consists of three sub-zones:

- A 500 m buffer of government- owned forest lands of the Northern Forest Reserve along the eastern and southern boundaries;
- A 200 m buffer or privately-owned forest lands on rugged terrain within 1km of the northern boundary, and
- A 200m buffer of privately- owned agricultural lands within 2 km of the western boundary.

To date neither the management plans or strategies nor the proposed buffer zones have been approved or ratified by government.

Project Objective, Outcome, Output, Activities

139. **Project Objective**: To demonstrate a model for effective integrated landscape management encompassing the strengthening of an existing PA (Morne Trois Pitons National Park) and establishment of its buffer zone in order to reduce threats to biodiversity and ecological functioning.

Component 1: *Strengthening the core zone management of Protected Areas at systemic level and scale up innovative interventions at core zone of selected PAs to improve Sustainability.*

140. **Output 1.1** ***Develop and implement resource management strategies for Morne Trois Pitons National Park (MTPNP), including: guidelines and restrictions on productive activities within PA boundaries; resource management and business plan; and strategy for reducing threats to BD from within and outside the PA***

141. **1.1.1. Biodiversity assessment, monitoring and conservation**. Carry out biodiversity assessment, develop and implement priority conservation and monitoring programmes for MTPNP and immediate surroundings. Create baseline from which to assess and monitor threats and manage biodiversity and ecosystem services within the MTPNP and its buffer zone. Biodiversity assessment will extend to other terrestrial PA sites so as inform PA system planning, including connectivity and priority sites for management intervention. Conservation and management programmes will be developed and implemented for key biodiversity and ecosystems identified and known, including for endangered species and key ecosystem services (i.e. threatened watershed). Database and terrestrial habitat maps will be developed, along with ongoing monitoring programmes. Management and control programmes will be initiated or supported for invasive species and pathogens. Outputs of assessment will help with zonation within the core zone (resource management zones) to be included in the management plan. Training of existing staff to carry out assessments and monitoring will be an integral part of this activity. Specific biodiversity conservation programmes will also be supported. The Biodiversity Assessment, Monitoring and Conservation activities include;

- Biodiversity assessment of vegetation, birds, invertebrates (incl. butterflies), herpetofauna, and threatened species.
- Support to conservation efforts for (1) *Amazona arausiaca* (dispersal/habitat connectivity issues, population census, foraging and phonological data); (2) *Amazona imperialis* (breeding biology, population status, foraging and phonological data); (3) Mountain Chicken *Leptodactylus fallax*; (4) Forest Thrush *Turdus lherminieri* (population census), (5) Laurier de rose species *Phoebe elongata* Lòwyé di-wòz (status), (6) Black capped Petrel *Pterodroma hasitata* (population status/verify possible accounts), and Puerto Rican Crested Anole (population census). Additional specific programmes may be identified through outputs of the biodiversity assessment. This Project will coordinate with the WB Regional disaster vulnerability response Project carrying out a forest inventory, soil and hydro-meteorological studies and monitoring.
- Identification of threats, including current and potential climate change impacts on biodiversity and ecosystem functioning, (including rainfall, watershed, forest structure and composition) hunting impacts and monitoring plan. Assessment, monitoring and management plans for introduced and invasive species (lemongrass, tilapia in freshwater lakes), and pathogens (chytridiomycosis).

142. **1.1.2 Develop new and/or update draft management plan; approve and initiate implementation of Management Plan for the MTPNP**. Either update the existing or develop new management plan for the MTPNP that will take into consideration resource management, visitor management and financial sustainability and will include: (a) Guidelines on all productive activities within the PA boundaries (i.e. ban on all burning, clear cutting, charcoal harvesting within the park and the implementations of regulations for the harvesting of all non-timber forest products (NTFPs)); (b) Operational and functional management zones; (c) Staffing and financing strategy (see 1.3.5 and 1.3.6 below); (d) an operations manual and management guidelines for National Park Unit staff (and PA staff) that will provide guidelines for reducing threats to biodiversity coming from within and outside of the park (linked to Community Resource Plans developed under Component 2); and (e) roles for all stakeholder groups in park management activities, ensuring gender equity and participation of woman's groups (Dominica National Council of Woman and Bureau of Gender Affairs).

143. **Output 1.2 Operational and functional capacity established for management of Morne Trois Pitons National Park to ensure that National Parks Unit capacity is increased**.

144. **1.2.1. Provide sufficient resources (equipment and materials) for effective managemen**t **of MTPNP**. Purchase vehicle and field equipment to ensue efficient and effective maintenance coverage, surveillance and enforcement of agreed management strategies; interpretation booth for Freshwater Lake.

145. **1.2.2. Operational capacity for MTPNP**: Provide training on site operations and management, PA planning methods, enforcement, financial management, organizational management and leadership, visitor management, fire management; community participation and co-management that ensures gender equity, first aid, natural resources management and monitoring, ecosystem conservation and management focused on increasing information on endangered and threatened species within the PA, and communications. Incorporate outputs of capacity development strategy and action plan (see 1.3.5 below). Training of two (2) Forestry, Wildlife and National Parks Division extension officers who will be hired to support buffer zone outreach.

146. **1.2.3. Develop and implement a surveillance plan** to monitor with the intent of preventing illegal activities and fires and enforcement of new guidelines on human activities within the park in order to prevent harmful practices, as well as to prevent encroachment (i.e. land clearing and squatting). A plan will be developed and carried out jointly by PA Coordinating Unit (PACU) staff, Forestry, Wildlife and National Parks Division), NGO and community stakeholders that will include surveillance and covers both the core area and buffer zones.

147. **Output 1.3 Officially establish a Protected Area Coordinating Unit to actively implement a PA system across functional managing agencies for improved management effectiveness**.

148. **1.3.1. Establish Protected Areas Coordinating Unit (PACU).** Hire staff (PACU Coordinator, PACU Programme Assistant and Forestry Division PA Technical Officer). Provide training to new staff and support staff from existing agencies in PA system-level planning, priority setting, community co-management and inter-institutional coordination, with a focus on integrated landscape level approaches that encompass both core areas and buffer zones of Dominica's PAs. Incorporate outputs of capacity development strategy and action plan (see 1.3.5 below). Establish Protected Area Advisory Committee.

149. **1.3.2. Strengthen protected areas policies:** A comprehensive framework is necessary to establish and strengthen procedures and standards for PA management. The project will support the (a) Preparation of a National Policy for the conservation and management of PAs that will stress the need for the PA System to preserve and maintain key ecological processes that provide environmental goods and services. The starting point will be a clear definition of Dominica's Protected Areas System, clarification of the functions of individual sub-systems (i.e., managing entities) and their ability to generate sustaining revenue, as well as integration with a landscape approach (i.e., buffer zones)

150. **1.3.3. Develop protected area legislation or update and amend existing protected area legislation** and Acts (National Parks and Protected Areas Act, Forestry Act and Fisheries Act). Legislation and regulation detail will be determined through extensive stakeholder consultations. Legislation would be developed to support the establishment of an institutional coordinating body (i.e. PACU) and the establishment of a Protected Area System Policy and Plan and supporting institutional structures. Review the existing PA legislation (National Parks and Protected Areas Act, Forestry Act and Fisheries Act) and *Draft* Protected Area Bill and amend as appropriate or develop new legislation. Include PA classification and designations in legislation: (a) Establish additional regulations to allow for effective management and enforcement of regulations and penalties within PA boundaries; to establish operational guidelines to clarify responsibilities and coordination mechanisms between the Division of Forestry, Wildlife and National Parks and the Ministry of Tourism on management of ecotourism / nature sites within National Parks; to allow for the legal establishment of buffer zones and ecological corridors between terrestrial PAs, including increased protection of private forests in these areas. Establish standard co-management agreements for the protected areas and buffer zones. (b). Enact legislation that supports improving the financial

conditions and revenue generation opportunities of the PA system to ensure that it is capable of providing an optimal level of protection and conservation based on the requirements of each of the PA types, including: (i) Legal and institutional conditions to enhance and implement new financial mechanisms in order to diversify the current funding portfolio for PAs and nature sites; (ii) Establishment of a conservation trust fund to ensure a stable funding base; and (iii) Recognize the ecosystem services provided by PAs and develop the legal framework and policies for institutionalizing payments for ecosystem services in all environmental regulations and policies; and establish a legal link for PAs to benefit from payment for ecosystem services opportunities, including voluntary carbon market, REDD and mandatory markets

151. **1.3.4. Improve financial stability of Protected Area System** by improving the allocation and monitoring of financial resources for the management of PAs, diversify revenue sources and generate multiple financial streams, including: (a) Develop roadmap for establishment of a protected areas conservation trust fund and initiating a debt for nature swap for the purpose of seed funding for the conservation trust fund; (b) Update legal and policy framework to support a broader and more flexible approach to revenue generation, ensure effective application of revenue generating mechanisms across the PA estate; (c) Update legal and policy framework to ensure retention of PA and nature site raised income by the PAS and assurance of its reinvestment into site management; (d) Optimize existing revenue sources and increase their total value: (i) Tourism entrance and user fee collection, administration and purchase system is improved and updated; (ii) Rationalize fee structures and rates across all PAs and for all revenue mechanisms; (iii) Establish a process and methodology for periodic re-evaluations of rate suitability, to ensure that the PA fees remain competitive as a revenue source; (iv) Generate a communication strategy to promote PA goods and services that inspires confidence and a sense of transparency around the collection of fees and their use for site and system management; (e) Institutionalize tax equivalency between stay-over visitors and cruise passengers, and ensure that the proposed 10 USD tax or levy for cruise passengers and crew members is dedicated as funding to the PA estate. (f) Develop a tourism and natural resource use based concession strategy at PAs and nature sites; (g) Conduct a Dominica specific economic valuation of the ecosystem goods and services generated by the PA estate and identify payment for ecosystem services markets; including: (i) SWOT analysis on voluntary carbon market, REDD and mandatory markets and develop carbon valuation options for pilot project implementation; and (ii) Define a set of PA dedicated tariffs for ecosystem services on the PA´s goods and services based on the economic valuation exercises and studies (h) Establish agreed upon funding and staffing criteria for adding nature sites to the list of properties currently under management by the various PA managing agencies; and (i) Identify and implement cost saving opportunities.

152. **1.3.5. Develop a Protected Area System Plan that includes an overall management strategy for the National PA system** that will address representativeness and connectivity, threat abatement, management effectiveness, governance, participation and distribution of benefits, integration into sectoral plans and processes (such as water improvement projects managed by Dominica Water and Sewerage Company (DOWASCO) and the EU-funded Banana Accompanying Measures to enhance productivity of the agriculture sector), a PA system financial plan and development strategy, as well as capacity development strategy and action plan. The overall management strategy would address varying issues related to both terrestrial and marine protected area. As part of this strategy plan, planning tools will be improved by designing and implementing administrative and financial processes and standards, including: (i) Standardized and coordinated cost and operating procedures between site and system level and between sub-systems that facilitate control and decision making; (ii) Uniform criteria and policies for resource and financial management that will define appropriate level of core costs and staffing needs for all PAs, reducing uncertainty in the management of information and increasing coordination and systematic monitoring of investments; and (iii) Conduct a comprehensive inventory of all assets and equipment in use by the PAs and integrate capital investment and equipment needs into operational plans. In addition, the outputs of the biodiversity assessment will be integrated into the appropriate system planning sections.

153. **1.3.6. Develop evidence-based management plans.** Implementation of the long-term management and

conservation strategy will use management plans as planning and implementation tools and will take into consideration resource management, visitor management and financial sustainability by: (a) Defining a standard and format for PA and nature sites management and business plans that includes a staffing and financial sustainability component; (b) Updating current PA management plans for all PAs and all nature sites, and generating new ones where not available; (c) Developing site specific business and implementation plans.

154. **1.3.7. Consolidated protected areas information system supporting PA management objectives**. Development and operationalization of a Protected Areas Information System. The system will include GIS and data management systems to incorporate all existing island resource based data, as well as, new data gathered through the Project's biodiversity and natural resource assessment. The data management system will foster networking with other island-based and regional systems to ensure coordination and information sharing.

155. **1.3.8. Standardize administrative and financial processes in co-management agreements**, including: (a) Clear policies and legal standing governing PA co-managers for the management and financing of PAs; (b) Clearly define roles and responsibilities of all co-managers; (c) Build capacity in co-managers and further promote other institutional arrangements that may facilitate community participation in management of the PAS

Component 2: Establish and manage Buffer Zone as a key component of National Protected Area System and select experiences to be scaled up beyond the buffer zone

156. **Output 2.1 Buffer zone for Morne Trois Pitons National Park legally established and demarcated, with inter sectorial committee for the management of integrated PA landscapes (core and buffer zone) established and functioning within legal framework.**

157. **2.1.1. Establish inter sectorial Committee for the management of integrated landscapes (core and buffer zone).** Obtain Cabinet approval for Committee which should consist of key stakeholders, from implementing natural resource and PA agencies, statutory bodies (i.e. DOWASCO), communities, CBOs, livelihood related organizations and private stakeholders, ensuring women's participation. The first priorities of the committee will be to clearly establish institutional responsibilities and develop mechanisms for monitoring and applying control measures for activities that contravene the resource use established for PA buffer zones.

158. **2.1.2. Identify and define the boundaries of the buffer zone** through studies and consultations that develop indicators and criteria for the buffer zone designation processes and address ecological conditions, watersheds, key species, land uses, socioeconomic conditions of communities, and land tenure in an area outside of the MTPNP boundaries of an estimated 2,000 hectares. Carry out four (4) Community Resource Management Plans (see Activity 2.3.1), incorporate Pond Casse site development plans into designation process, carry out additional studies as needed (building on the 2011 buffer zone plan), and conduct extensive stakeholder consultations to identify development priorities and conservation strategies that address critical threats to biodiversity and ecological functioning

159. **2.1.3. Legally establish buffer zone as a managed landscape,** either through existing legislation (i.e. EPA) or newly drafted / updated legislation or regulations. Establish land use guidelines and regulations for activities in the buffer zones. Legislation and / or regulations should include development of land and and resource use, including greater limits on hunting and harvesting of wild plants; prohibition on charcoal burning and use of fire to clear land; prohibition on tilling of land (slope > 15%) that results in erosion; and greater limits on development (i.e. housing, roads and other infrastructure).

160. **2.1.4. Demarcate the buffer zone with signposts**. The project will ensure that the buffer zone areas are officially

established under existing laws and regulations, and then demarcated and signposted. Boundary areas of the MTPNP requiring demarcation will also be signposted.

161. **Output 2.2 Codification of higher minimum standards in environmental impact assessment (EIA) requirements for new developments in the buffer zone.**

162. **2.2.1. Codify stronger development standards into the EIA process**. To support the Community Resource Management Plans (see Output 2.3.1), the project will work with the government to; (a) Codify stronger development standards into the environmental impact assessment (EIA) process in the country, including mechanisms to support inter-agency EIA review, and (b) create sector specific development guidelines that outline the roles and responsibilities of agencies overseeing various sectors (forestry, agriculture and planning) with regard to biodiversity and land management within PA buffer zones. These efforts will be closely linked to the on-going CDB-supported project to create a newly drafted National Physical Development Plan and National Land Use Policy, as well as the *Draft* Physical Planning Bill and the *Draft* Climate Change, Environment and Natural Resource Management Bill (2013).

163. **2.2.2. Develop a land tenure and compensation review process.** Some lands in the proposed buffer zone are privately owned, regulating activities on these parcels of land will require change of tenure or flexible arrangements that can accommodate the emerging management arrangements. This Project will help develop land tenure and compensation review processes to address land tenure issues and conflicts within the PA buffer zone, which is necessary to ensure support for and willingness to abide by guidelines and sustainable management strategies for PA buffer zones. The option of transferring development rights to another location will also be explored as a possible low cost long-term compensation option.

164. **2.2.3. Conduct outreach and education programmes in MTPNP buffer zone**. Work with the MoAF to expand the scope of its current outreach programmes to farmers and communities to improve institutional capacities for coordinated and effective conservation and management. This outreach programme will target private partners (civil society as potential allies) to; (a) implement landscape level approaches and integrate natural resource economics to guide effective policy and decision-making with respect to valuing ecosystem services in the context of land development options, and (b) Facilitate the direct involvement of communities in natural resource management by encouraging the participation of community groups, the private sector (agriculture, tourism, commercial, manufacturing, industrial sectors), women and NGOs in the Inter-Institutional Committee.

165. **Output 2.3 Identify physical threats and reduce vulnerabilities in the MTPNP using community based land management activities to improve livelihood viability and associated socioeconomic conditions**

166. **2.3.1. Develop four (4) Community Resource Management Plans (CRMP).** The Environmental Coordinating Unit (ECU) and the Planning Department will work together with four local communities (La Plaine, Petite Savanne, Pond Casse and WottenWaven/Trafalagar), all within close proximity to the MTPNP boundary – to develop and implement community resource management plans similar to those developed in the GEF funded Sustainable Land Management Project that identified development priorities and established resource use plans and conservation strategies that address critical threats to biodiversity and ecological functioning including water resources and land degradation. The CRMP developed under this project will have a strong focus on the buffer zone (and the core area of the PA as needed), and will incorporate projections of future climate change impacts.

167. **2.3.2. Engage local residents within the buffer zone in livelihood activities**, particularly through agricultural management and conservation based economic development. The project will reduce the negative impacts of agricultural production in and around the MTPNP buffer zone through support of sustainable agriculture productivity. Gender related aspects of the project will be addressed through close collaboration with the Dominica National Council of Women (DNCW) who will work with communities and organizations to ensure gender equity in participation of women in project activities, help ensure socioeconomic benefits to woman, and will monitor woman's inclusion through the Project period. Collaboration will also take place with the Bureau of Gender

Affairs. In consultation with community partners (including Dominica Organic Agriculture Movement, National Association of Youth in Agriculture (NAYA), Community Councils and Community Improvement Councils), activities will include: (a) Developing and disseminating a manual of biodiversity friendly agricultural and land management practices; (b) providing technical support for local inhabitants to undertake activities such as planting of trees and reforestation with native species (to aid with erosion control) that will provide socioeconomic benefit, improve land degradation, and reduce pressures on the protected area; (c) Supporting collection and analysis of data on fast growing species that can be encouraged in the buffer zone to support livelihood activities without impacting the PA forest (i.e. Castor seeds, Cinnamon trees) while ensuring plant pathogens (Red Palm Mite (*Raoiella indica*), Black Sigatoca Disease) likely to attack agricultural and important forest species are addressed, species that are already stressed by the effects of climate change and hurricanes; (d) Encourage and support the production and expansion of organic agricultural practices, supporting the umbrella organization Dominica Organic Agriculture Movement and Dominica National Council of Woman, including: (i) Production and use of organic fertilizers "Liquid Tea", supporting existing and new producers; (ii) Specific organic agricultural livelihood initiatives, such as the Giraudel Flower Growers (Giraudel Women's Group), Bellevue Chopin Organic Farmers (BCOF), and Eco-balance – Biodiversity Center for Learning and Training, Organic staple flower production (Ormond's Organics), etc., (iii) Production of castor seeds and cinnamon trees; (iv) Review the viability of the establishment of organic standards and certification process, supporting National Farm Certification Scheme and GAP Standard in collaboration with BAM and Bureau of Standards. Additional agricultural and livelihood initiatives that will be identified through consultations at during first 6 months of Project implementation. Agricultural practices, techniques and examples from Project activities will all be incorporated into distribution of manual of biodiversity friendly agriculture island-wide.

168. **2.3.3. Strengthen community/organization capacities to effectively manage the buffer zone.** To facilitate the implementation of the above-mentioned activities, the project will strengthen capacities to effectively manage the buffer zone around the MTPNP, including capacity building/training for; (a) technicians and community members to create community resource maps, (b) training in and implementation of sustainable productive activities, (c) alternative agriculture, with a primary focus on organic agriculture practices, (d) community capacity building in surveillance and reporting, (e) extension officers within key government Departments in the area of community vulnerability mapping, and climate change adaptation planning, (6) eco-tourism initiatives, and (7) community based organization/farming group organizational and financial management. Gender equity ensured in trainings, and further training needs identified through implementation of activities.

169. **2.3.4. Community based education programme.** Project will undertake a community based education programme (modelled after the SLM project) to; (a) raise the awareness of the socioeconomic benefits generated by the PAs (ecosystem services such as water provision and soil retention, as well as potential tourism revenues), including benefits to women, (b) raise awareness of sustainable land management, including organic agricultural; (c) inform local residents of new resource use restrictions within the buffer zone; and (d) restore traditional knowledge regarding land management, organic agricultural practices, and ethno-botany.

PROJECT RISK ASSESSMENT

Table 4: Project Risks Assessment and Mitigation Measures

Risk and Category	Level	Likelihood	Assessment	Mitigation Measure
Institutional: Responsibilities for PAs and their buffer zones remain diffuse and there is	Medium	Moderately likely	Low	Both Components 1 and 2 of the project have been specifically designed to foster collaboration among implementing partners. The ECU will play a lead project execution role and will ensure

Risk and Category	Level	Likelihood	Assessment	Mitigation Measure
a lack of inter-ministerial coordination.				coordination and collaboration among the different entities. The roles designated in the stakeholder plan will be formalized through agreements with clear TORs. The project will develop management and financial strategies, clarifying roles, elaborate long term goals and objectives, and provide support to increase networking. A National Inter-sectorial Committee will be established to oversee, coordinate and support the activities of the various agencies and partners in carrying out landscape level approaches that encompass both the protected area and its buffer zone. Responsibility will include integrated planning, harmonization and coordination of work programmes and budgetary allocations, with MOUs for inter-agency joint implementation of activities.
Lack of follow through relating to implementation commitment. Community Resource Management Plans are completed but never implemented.	Low	Moderately likely	Low	The management structures developed under this project will delineate clear links between this project and institutions work-plans clearly showing the relationship between implementation and benefits derived from honoring obligations. It will support reporting requirements under CBD. The Community Resource Management Plans (CRMPs) developed under the UNDP-GEF SLM project are being successfully implemented at this time; as one example, communities are using the maps developed under the CRMPs in the development of their disaster management plans. Additional plans will be developed through this project to foster even more collaboration supported by the new institutional arrangement that will be developed in this project.
Local communities in the PA buffer zone resistant to change in resource use and livelihood practices.	Low	Unlikely	Low	Working in conjunction with the local communities, the project will develop a livelihoods programme that increases the ability of local residents to earn a living from sustainable agricultural practices, as well as participation in tourism activities within the PA. In addition, the project will place an emphasis on communication and outreach to local communities.
Environmental: Natural disasters (esp. hurricanes) threaten forest habitat and livelihoods	Medium	Likely	Moderate to High	Dominica has implemented a wide range of approaches to Disaster Risk Reduction and Management that will help to minimize the impacts of natural disasters on natural areas and the country's population, including rural residents dependent of forest resources for their livelihoods. The Office of Disaster

Risk and Category	Level	Likelihood	Assessment	Mitigation Measure
				Management has established a national Disaster Management Plan and is implementing the RDVRP (Regional Disaster Vulnerability Reduction Project), and the office is supported by CDEMA (Caribbean Disaster Emergency Management Agency) and NEPO (National Emergency Planning Organization).
Climate change, especially reduced precipitation and drought, imperil habitat and cause declines in agricultural production and livelihoods	Medium	Likely	Medium to High	Establish buffer zones (and potential for ecological corridors) to allow species to migrate to different habitat areas; strengthen capacities for surveillance and response to forest fires in PAs and buffer zones; encourage water conservation, low-water requirement crops, and rainwater harvesting among farmers and other local residents in buffer zones
Legislative: Recurring discussions on land use changes relating to PA and their designated buffer zones.	High	Moderately likely	Medium	This project will support the review and rationalization of existing acts relating to PA to ensuring that they meet the needs of Dominica without compromising the integrity of PAs. The project will support the development of standing procedures for the conduct and review of EIAs, provide guidelines for activities around PAs, and strengthen legislative framework for PA management. During the implementation of the project, the economic value of PAs will be emphasized to both stakeholders and decision makers so that the true value of PAs are appreciated and over time there will be a greater community desire to enhance BD conservation.
Financial: Government unable to guarantee a consistent stable funds to ensure sustainability of PA	Medium	Moderately likely	Low	This project will review and improve the flexibility of the PA financial system and further explore financial mechanism specifically the debt for nature swap and the CTF in order to establish a stable base level of funding for PAs in Dominica.

* Risk rating – H (High Risk), M (Modest Risk), and L (Low Risk). Risks refer to the possibility that assumptions, defined in the logical framework, may not hold.

COST-EFFECTIVENESS

170. This Project is designed to overcome key barriers to optimum PA management in a cost-effective manner. Barrier removal will lead to positive environmental impacts on key ecosystems throughout Dominica. This will be done by enhancing the systemic (policy/regulatory) and institutional mechanisms - along with the human resources - to work more effectively, which will significantly leverage resources and reduce duplication. This, in turn, will reduce cost and the waste of financial resources. Support for new strategic action plans and instruments will help re-align and enhance the PAs towards a PA System.

171. The project is designed to create working examples of conservation tools currently not operational in Dominica,

e.g., PA management and business plans, coordinated management models, etc. The use of the permanent protected areas Trust Fund is preferable to the alternative of a one-off disappearing fund as it will enable PA management costs to be met in the long term and in a stable manner. This will also improve the ability of the PAS to secure sufficient, stable and long-term financial resources and allocate them in a timely manner thus improving the enabling systemic and institutional environment for PAs, and enhance the capacities of the PA management bodies to manage the PA estate. This will, in turn improve the capacity for PAs to be managed more efficiently and cost-effectively through: (i) The creation of adequate legal and policy frameworks; (ii) a strengthened financial management, information and tracking system; (iii) new revenue options; and (iv) new budget reporting procedures. Again, these are cost-effective design approaches. As lessons learned are disseminated throughout Dominica and the region, the project's impacts will be amplified further increasing the overall cost-effectiveness.

172. Project activities are designed to work with proposed and on-going conservation initiatives. The project is designed to achieve the proposed outcomes while only incurring essential incremental expenses. To accomplish this, the project will build upon the existing baseline activities and national and local capacities, as well as available infrastructure, and will target increased co-financing commitments during project design and implementation. The project will seek to contribute to the existing government efforts to expand and strengthen the national PA system, and will strengthen the capacity of PA institutions to meet biodiversity conservation priorities in a more holistic way in compliance with international standards. This increases the project's cost-effectiveness by leveraging and extending the buying power of project funds. Technical assistance, both national and international, is designed to be strategic and efficient. This means that properly selected individuals can provide support for several project outputs, alleviating the need to recruit, transport, and otherwise support a large team of experts to support project implementation.

COUNTRY OWNERSHIP

173. The Commonwealth of Dominica is pursuing a 'green' development path in keeping with the government's pronouncement that declared Dominica the 'Nature Isle'. Consequent upon this aspiration, Dominica is aligning its development agenda and biodiversity conservation strategy with the global biodiversity objectives. All of the goals and targets of the 2011-2020 Strategic Plan are therefore considered relevant, however, the country has selected five targets as national priorities. It is hoped that these priorities, articulated in the NBSAP will be fully realized by 2020. Among the five targets selected are:

- By 2020, at least 15% of terrestrial, inland water and 15% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem service, are conserved through comprehensive ecologically representative and well-connected systems of effectively managed, PAs and other means, which are integrated into the wider land and seascape.
- By 2020, ecosystem resilience and the contribution of biodiversity to carbon stock has been enhanced, through conservation and restoration, including restoration of at least 15% of degraded ecosystems, thereby contributing to climate change mitigation and adaptation, and to combating desertification.

174. Dominica's revised NBSAP has listed this project "Supporting Sustainable Ecosystems by Strengthening the Effectiveness of Protected Areas System" as a first step to achieving these targets given its emphasis on the development of a PA system management plan that strengthens national institutional and systemic structures, promoting PA coordination and improved civil society participation in biodiversity management. Additionally, Dominica has signed on to the UNEP lead Caribbean Challenge Initiative (CCI) that call for the protection of 20% of terrestrial and near shore marine and coastal resources by 2020; this is another national effort to be supported by this project. Further, this project will assist Dominica in achieving the following goals of the CBD PoWPA: 1.2: To integrate protected areas into broader land- and seascapes and sectors so as to maintain

ecological structure and function, 1.5: To prevent and mitigate the negative impacts of key threats to protected areas, 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders, 3.1: To provide an enabling policy, institutional and socio-economic environment for protected areas and 3.2: To build capacity for the planning, establishment and management of protected areas.

PROJECT CONSISTENCY WITH NATIONAL PRIORITY

175. The project is designed to further the objectives of Dominica's plans and policies regarding biodiversity conservation, sustainable land management, and climate change mitigation. The NBSAP (2002) for Dominica lays out the country's vision for biodiversity conservation. Two of three goals listed in the NBSAP are directly addressed by the project, namely: "The conservation and sustainable management of Dominica's terrestrial and marine biodiversity to ensure intra- and inter-generational equity"; and "The promotion of sound and sustainable agricultural practices and technology within existing agricultural human capital so as to minimize the loss of agro-biodiversity, and reduce vulnerability to desertification, soil loss, and the contamination of water resources". The revised NBSAP (2013 – 2020) captures the work of the World Heritage Local Entrepreneurship Program (WH-LEEP) which is supporting community-based entrepreneurs operating around (the Morne Trois Piton) World Heritage sites; and the GEF-SGP community-based initiative "Compact" which is supporting community based initiatives to increase the effectiveness of biodiversity conservation of global significance. These initiatives are intended to improve the livelihood of the local populations who serve as custodians of the PA.

176. The National Action Programme to Combat Land Degradation (2004) identifies specific priorities to strengthen land use planning and policies and to implement land degradation mitigation measures. In this regard, Dominica has developed Community Vulnerability Atlases for four (4) communities. This project will support the preparation of four additional atlases for La Plaine, Petite Savanne, Pond Casse and WottenWaven/Trafalagar communities on the border of the proposed buffer zone of the MTPNP. In addition, Dominica is currently seeking to develop a National Land Use Plan, which will establish land use zoning based on environmental and economic criteria, with the goal of reducing the conversion of suitable agricultural lands to other uses. The proposed project will also support the objectives of Dominica's sustainable development policies and plans, including the GSPS 2012-2014, in which the Government undertakes to "support the development of buffer zones around the PAs to check future development" and to "ensure environmentally sensitive design principles are applied in any form of development within the PAs and buffer zones". In addition, the project will support the goals of two national strategies - the Low Carbon Climate Resilient Development Strategy and the SPCR - that were approved by the Prime Minister and Cabinet in April 2012 to facilitate Dominica's transformation to a low-carbon climate-resilient economy while addressing pressing development, livelihood and poverty issues confronting the country.

177. The project will contribute to Dominica's achievement of the Aichi Targets as follows: Targets 5 and 12, by greatly strengthening the effective protection of MTPNP, which encompasses many critical ecosystems and habitats in Dominica; Targets 6 and 8, by reducing the negative impacts of sedimentation, nutrient overloads and pollution on downstream coastal and marine environments critical for fishing; Target 7, by implementing sustainable agriculture and forestry activities in the PA buffer zone; and Target 14, by preserving ecosystem services (water provision, arable land) within a protected area and its surrounding landscape, which benefit *inter alia* women, indigenous and local communities, and the poor and vulnerable.

SUSTAINABILITY AND REPLICATION STRATEGY FOR PROJECT ACTIVITIES

178. There are three (3) gazetted National Parks in Dominica each having its own management arrangement with each management arrangement at a different stage of development. MTPNP is the largest and most advanced in terms of development having received World Heritage Status. The 6,872 ha park has a draft management plan but no

regulations to support the management plan. The National Parks and Protected Areas Act (1975) speaks to the development of a National Park Service, with a mandate that is assumed to extend to all (terrestrial) PAs in general. However, the NPUs current responsibility lies primarily with management of nature / recreation sites within the national parks and select sites outside its boundaries. This means that other PAs are managed by other agencies with different standards. This proposed project will support the integration of existing units and agencies into a management system that will support Financial, Environmental and Social sustainability and replicability.

Financial sustainability

179. The project will enhance financial sustainability by developing innovative financing mechanisms and financial management strategies to enhance access to financial resources and markets for sustainably produced tourism and non-tourism products. The financial sustainability of this project rests in part on the development of tourism and diversification of incomes and tourism products. The establishment of the different forms of PAs will not only lead to the expansion of PAs but will secure legal protection for these areas, especially within the buffer zones allowing for the development of alternative livelihoods. Further, the diversification of incomes through development of a wider range of tourism products as well as establishment of alternative livelihood activities will result in financial sustainability. The inclusion of women in economic activities will also boost local economies, household incomes and wealth creation. There is inadequate data on small scale tourism to accurately forecast the financial future; data collected by the various agencies is incomplete, and all available revenue data has not been included. While the evidence provided so far looks promising, it needs to be incorporated into a structured and rigorous financial management plan (as proposed for this project) in order to determine their true contribution to the economic development of Dominica and more specifically to PA sustainability.

180. As a result of the fragmented management of PAs in Dominica, there is leakage of funds away from PA financing. This has also lead to limited investment in maintenance and shortage of staff to deal with resource needs within the PAs and what will become, under this Project, the buffer zone. This project will establish the buffer zone, create a network of personnel to manage it, and develop a financial plan that will make the PA system financially sustainable. A PACU will be established as a coordinating unit and with the exception of the project specific positions, only two (2) new positions will be created; the PACU coordinator and the assistant. Because the PACU will be made up primarily of workers on the government's pay role, it is the expectation that the PACU will be integrated into one of the existing agencies and that the improved PA management system will be more than able to fund the two new positions in the PACU. This is one of the issues that need to be addressed during the project as part of the harmonization of agency responsibilities and enabling environment.

181. The project will strengthen individual and institutional capacity which is necessary to effectively manage PA financing. Staff will be trained and an effective finance system instituted to collect fees, maintain the infrastructure and market the product. A business plan will be developed with a livelihood component that makes provision for the input of stakeholders. The plan will also cater for private sector investment and support Dominica's participation in the Caribbean Biodiversity Fund (CBF), a Trust Fund supporting the Caribbean Challenge Initiative. The CBF is capitalized with US$15.77M and designed to facilitate the establishment and capitalization of a regional biodiversity fund including provision of technical advisory services to establish the CBF as a charitable organization generating sufficient income to finance sustainable management activities in the PAs of Project Participating Countries. Additionally, the legal institutionalization of the PA management system will allow for PA budgeting to be included into national accounting and budgeting process bringing national funding to the system.

182. The development of resource management and business plans and the development and upgrading of legislations including their harmonization are key elements of component one of this project. As part of the harmonization

of regulations, harmonization of the ability to generate financing from research needs to occur. Currently, Dominica is examining the legal ramifications of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity. In terms of active implementation, however, only the Fisheries Division has a consistent methodology and approach to financial receipts while financing generated from land based research occurs mainly *ad hoc.* At the time of project development, the Fisheries Division was not able to provide the details of the methodology, the amounts generated, the number of permits issued or any additional details; these issues will be remedied by this project. The present operations do not reflect a benefits access or benefits sharing approach but rather an attempt to balance knowledge generation with use of resources for research use. Rationalizing and harmonizing resource benefits will constitute a financial sustainability element under this project as distinct from research for agroforestry management

Environmental sustainability

183. This project will support a multi-stakeholder management system that will progress to a co-management structure that is most suited to the productive landscape envisioned by Dominica for its buffer zone and other parts of it PAs. The current staff servicing PAs in Dominica is inadequate at best making it impossible to adequately monitor and protect the rich and sensitive biodiversity resources of Dominica. Stakeholder participation in management will bring ownership and a greater level of environmental stewardship which are key elements of environmental sustainability. These stakeholders will not only serve to police the resource but because of the training they will receive from the project and the ownership they feel from being involved in management of the resource, they will make use of the resource in an environmentally sustainable manner. The management structure that will be developed under this project will have a cadre of trained, dedicated staff, tools and adequate financing to enable effective monitoring and reporting on the country's marine and terrestrial habitats and ecosystems. Such an effective Monitoring and Evaluation programme will allow early detection of threats and causes of land degradation and biodiversity loss allowing resource managers to implement conservation strategies that contribute to environmental sustainability.

Social sustainability

184. To further promote sustainability of this project, a carrying capacity assessment will be done for each site during year one of the project. Stakeholders involved in livelihood operations around the PAs (vendors, tour operators, tour guides, park personnel, taxi drivers, fishermen and farmers) and the various public sector agencies involved in systemic planning and management will participate in the development of zoning plans that will include appropriate activities permitted at each site. This participatory approach will allow for the inclusion of differentially challenged persons, vulnerable groups or minorities like the Kalinago people and the promotion of gender equity. This collective engagement of Dominica's population will deepen ownership of the project and ensure social sustainability. Dominica National Council of woman (DNCW) in partnership with the government's Department of Gender will work with Dominica Organic Agriculture Movement (DOAM) to ensure gender equity during project implementation (recruitment of staff and consultants) as well as monitor woman's participation in training, community consultation and other capacity building initiatives. Giraudel's Flower growers will also receive technical support under this project.

Replication

185. While this project is designed to *Support Sustainable Ecosystems by Strengthening the Effectiveness of Dominica's Protected Area System,* the emphasis is on MTPNP and its Buffer Zone. Apart from the management system and its institutional structure including legal and financial plans, initial activities (demarcation of the

buffer zone, development of a zoning plan and designated activities for the buffer, determining the carrying capacity) will concentrate on MTPNP the largest and most recognized of the terrestrial PA. Once these initial activities have been completed, the skills and competences will be transferred to other less developed sites. A 2011 proposed buffer zone for MDNP will benefit from the lessons learnt for MTPNP. Other elements of MDNP will use best practice from MTPNP to guide implementation and improve management effectiveness. All other units of the PA system will be improved over time using the skills and lessons learnt from MTPNP.

186. Best practices and lessons learnt will be documented and made available to local communities to guide the protection and management of small eco-systems, habitats and other natural resource not documented but which have local and cultural significant. At the wider regional and global level, M&E reports, best practices, and management plans will be made available as resource material for use in institutions and by other resource managers.

PART III: Management Arrangements

187. The project will be implemented under UNDP's national implementation modality (NIM) with the ECU as the Implementing Partner and the DFWNP as the Responsible Party; these agencies will follow the standards and regulations of the UNDP, the GEF implementing agency of this project. The Implementing Partner (ECU) is entity responsible for the project outcomes, and is accountable for its management, including monitoring and evaluation activities, the achievement of outputs and effective use of resources. A single Implementing Partner is designated to lead each project. This Partner may establish agreements with other organizations or entities in order to support the achievement of the outputs envisaged in the project, this/these other/s instance/s is/are called: Responsible Party(ies).

PROJECT OVERSIGHT

188. The Environmental Coordinating Unit (ECU) in the Ministry of Health and Environment is the Implementing Partner. The DFWNP in the MoAF will be a Responsible Party. The ECU will provide support to, and inputs for, the implementation of all project activities, recruitment of project staff and contracting of consultants and service providers with advice from and the involvement of the DFWPN and UNDP. International procurement will be mainly handled by the UNDP upon request of the PACU and the ECU.

189. The organizational structure of the project is described below.

190. **The Project Steering Committee** is the highest decision-making body in project management and implementation. The responsibilities of the Project Steering Committee include providing guidance and strategic advice to the PACU for the implementation of project activities to ensure the integration of project activities with poverty alleviation and sustainable development objectives; ensuring coordination between the project and other on-going activities in the country; ensuring interagency coordination and full participation of stakeholders in project activities; providing policy advice in adherence to Government of Dominica, UNDP and GEF policies and procedures; reviewing and approving the AWP proposal, and reporting on project implementation. The Steering Committee contains four distinct roles:

- **Executive/Project Director**: individual representing the project ownership to chair the group.
- **Development Partners/Senior Supplier**: individual or group representing the interests of the parties concerned which provide funding for specific cost sharing projects and/or technical expertise to the project. The primary function within the Project Steering Committee is to provide guidance regarding the technical feasibility of the project.
- **Beneficiary Representative**: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The primary function within the Project Steering Committee is to ensure the realisation of project results from the perspective of project beneficiaries.
- **Project Assurance** is the responsibility of each Project Steering Committee member; however the role can be delegated. The project assurance role performs objective and independent project oversight and monitoring functions, independent of the Project Manager (PACU), ensuring appropriate project management milestones are managed and completed. Regular operational oversight will be ensured by UNDP, through the UNDP-CO in Barbados, and strategic oversight by the UNDP-GEF Regional Technical Advisor (RTA) responsible for the project. This oversight will include ensuring that the project practices due diligence with regard to UNDP's Social and Environmental Screening Procedure (SESP). UNDP will provide inputs to the Project Steering Committee members regarding the criteria of general project implementation as a reference source for Project Steering Committee members to then provide inputs and directions to the PACU and the Project Coordinator.

191. The Project Steering Committee will be chaired by the Director of ECU and shall be responsible for supervising

project development and coordinating the Project Steering Committee members that consist of representatives from the Ministries of Agriculture and Fisheries, Finance, Tourism, Planning, SSMR LAMA and the Dominica National Council of Women. UNDP will have one representative present that will advise the Project Steering Committee in its deliberations and may vote in cases where a majority has not been met. Members will be elected during the Inception meeting. The Project Steering Committee members shall meet at least twice per year. The Project Coordinator will be a member of the PSC as an ex-officio observer responsible for taking and distributing minutes. Other PACU staff working with and under the Project Coordinator shall attend meetings of the Project Steering Committee by invitation on an as needs basis. The Implementing Partner shall report to UNDP and GEF. Terms of Reference are included in Section IV Part II.

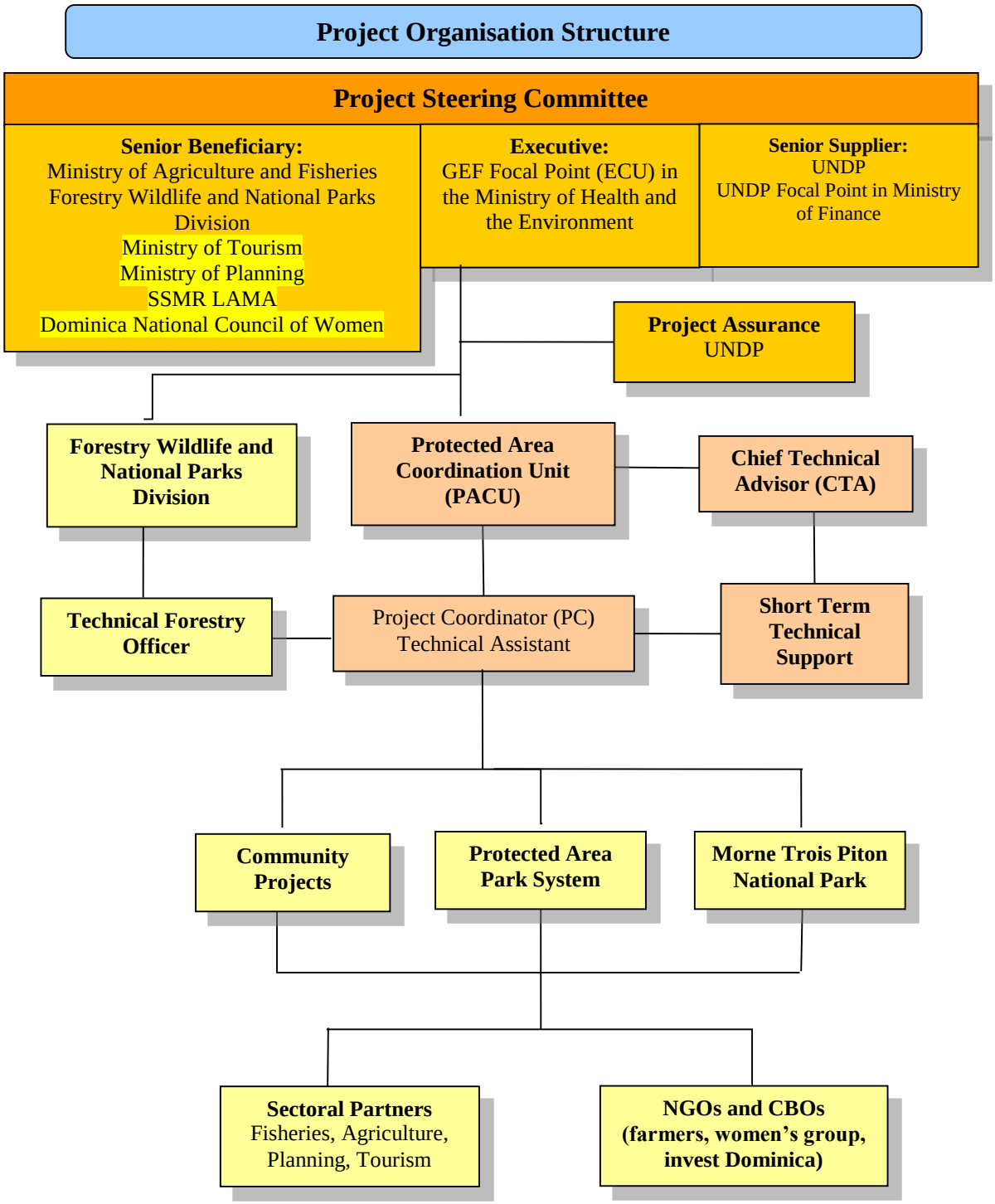

Figure 1: Overview of Project Organisation Structure

192. **UNDP's roles as Project Assurance** are mainly to: (i) monitor the project's progress towards intended outputs; (ii) monitor that resources entrusted to UNDP are utilized appropriately; (iii) ensure national ownership, on-going stakeholder engagement and sustainability; (iv) ensure that the project's outputs contribute to intended country programme outcomes; (v) participate in the Project Steering Committee; (vi) report on progress to donors and to UNDP through corporate reporting mechanisms.

193. A **Protected Area Coordinating Unit (PACU)** A Protected Area Coordinating Unit (PACU) will be established to carry out day-to-day project management and strengthen the Implementing Partner's capacity in ensuring project deliverables are both timely and achieve quality results. The PACU will be a distinct unit housed within the ECU that will parallel both the DFWNP and the Fisheries Division as it works to develop a systemic approach to PA management. The PACU will be headed by a Project Coordinator (PC) supported by a Chief Technical Adviser (CTA). The PACU will be responsible for providing government oversight and guidance for project implementation, including the coordination of project activities among the main parties to the project. The PACU will be responsible for overall coordination of project activities, but in particular, it will coordinate PA management and the landscape level activities that are largely linked to policy and systematic and institutional capacities for managing PA landscapes. The PACU will also be responsible for coordination and mainstreaming of lessons and experiences into government operations, lessons learnt from activities in other related GEF-funded projects and linking with additional on-going related projects. The PACU will be guided by the PSC. The plan to achieve outputs for a given year is articulated in the AWP that will be drawn up by the PC, with technical inputs of CTA and DFWNP staff. The PACU will also engage the support of volunteers if necessary.

194. More specific responsibilities include:

- To develop common understanding of what is needed to expedite the implementation of the project;
- To ensure that the expected results of the project are of satisfactory substantive quality and that they contribute to the achievement of the intended outcome. This will be discharged through the (i) approval of project work plans, TORs, reports, (ii) follow-up on the implementation of recommendations made by regular project reviews and/or external evaluations, and (iii) conducting of internal reviews, evaluations and advice on the main outputs of the project.
- To ensure that project resources, national as well as international, are effectively utilized for their intended purposes the following are required (i) verification of project budgets and payments, (ii) approval of budget revisions within the agency flexibility limit, (iii) follow-up on the implementation of recommendations made by external audits and (iv) internal audits as/if needed.
- Ensure that counterpart funds are made available by the project co-financiers according to the commitment letters, in sufficient quantities and in a timely manner to support project implementation.
- Ensure that project parties, particularly national parties (including the Implementing Partner) fully participate in project implementation, effectively collaborate in project activities and duly benefit from project results
- Ensure that the results achieved and lessons learned by the project are properly documented, proactively disseminated to, and duly shared with, all project parties, particularly national parties.
- Provide regular updates to the Project Steering Committee.
- Establish effective communication and decision-making amongst actors involved in the project.

PROJECT MANAGEMENT

195. The **Project Coordinator (PC)** will be responsible for day-to-day oversight and coordination on implementation of project activities, supported by operational support personnel (a Technical Forestry Officer and a Technical Assistant) dedicated to implementing the work of the project and DFWNP staff. The PC will report directly to the Project Steering Committee and is accountable to it for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds, on the basis of the AWP. The PC will report to the Project Steering Committee, on a quarterly basis and maintain a direct liaison with UNDP-CO through the Energy and Environment cluster will report to the UNDP-CO, in close consultation with the ECU, for all of the project's substantive and administrative issues. From the strategic point of view of the project, the PC will report on a periodic basis to the Project Steering Committee. Generally, the PC will be responsible for meeting government obligations under the project, under the NIM. S/he will perform a liaison role with the Government, UNDP and other UN Agencies, NGOs and project partners, and maintain close collaboration with other donor agencies providing co-financing. The PC shall be a fulltime resource acquired competitively. The full TOR for the PC is attached in Section IV, Part II.

196. A **Chief Technical Adviser (CTA)** will be internationally recruited and will be responsible for providing guidance and overall technical backstopping to the Project, S/he will render technical support to the PACU, PC, staff at PA agencies and other government counterparts. The CTA will coordinate the provision of the required technical inputs by various specialists, review and preparation TOR, provide technical support to assure the outputs of consultants and ensure other sub-contractors meet expected standards, and assist with organisation of project reviews, as well as, development of annual work plans and budgets. CTA will report directly to the PACU. Full TOR for the CTA is attached in Section IV, Part II.

197. In order to ensure strong presence of the project as well as close coordination with PA authorities and local stakeholders, a **Technical Forestry Officer (TFO)** will serve as a dedicated liaison officer reporting to both the PC and the Director of the DFWNP. Overall management of activities in community projects will be coordinated by the PACU under the guidance of the PC and in conjunction with the TFO and the DFWNP team. Where there are lessons learnt, intra-landscape crossover issues, or higher-level engagement is required, responsibility will be decreed to the PC. Specific responsible parties will take defined roles at landscape level. A technical committee will be established for the target sites, including all relevant stakeholders in the target areas to provide technical guidance and inputs to the site level activities of the project. The technical committee will also serve as a local level coordination fora for the project.

RESPONSIBLE PARTY

198. The Responsible Party (DFWNP) is designated by the Implementing Partner to support the implementation, planning and/or monitoring of certain activities/components within the project´s framework, using their technical skills and management services to support the achievement of project objectives. Project partners will assume responsibility for the different outcomes and outputs expected from the project, carrying out activities related to their actual capabilities in the field, ensuring effectiveness and efficiency of GEF funding. Implementation Agreements will be signed with relevant Implementing Partners and the Responsible Parties as necessary during the project inception phase.

FINANCIAL AND OTHER PROCEDURES

199. The financial arrangements and procedures for the project are governed by the UNDP rules and regulations for NIM. Financial transactions will be based on direct requests to UNDP from the Project Coordinator for specific activities (included in work plans and financial reports) and for advances for petty cash where necessary and considering the difficulties of implementation in many remote areas. The arrangements for financial reporting,

requests for transfer of funds, and the disbursement of funds will be detailed in MOUs between ECU and its implementing partners. All procurement and financial transactions will be governed by national rules and regulations, and must be compatible with the UNDP rules and regulations.

200. Dollarization clause: "The value of any contribution received by the United Nations Development Programme as part of this Agreement, and which is made in a currency other than the U.S. Dollar, is determined by applying the operational rate of the United Nations prevailing on the date that such payment is made effective. If there is a change in the operational rate of the United Nations before UNDP uses the entire amount paid, the balance will be adjusted according to the value of the currency at that date."

201. If a loss is registered in the value of the fund balance, UNDP shall inform the donor with a view to determining whether the donor has to provide more funding. Without having any such additional funding, UNDP may reduce, suspend or terminate assistance to the program/project. In the case where there is an increase in the value of this balance, this increase will go to the project to implement its activities, in agreement with the donor.

202. All accounts and all financial statements are expressed in U.S. dollars. The exchange rate used in each case shall be the monthly exchange rate set by the UN in the OECS. Notwithstanding the foregoing, payments to suppliers are made in local currency. In cases where the total contributions exceed the total reference amount, a budgetary review of the project will be carried out as per UNDP requirements.

Direct Project Services

203. In its role as GEF Implementing Agency (IA) for this project, UNDP shall provide project cycle management services as defined by the GEF Council. The GoCD shall request UNDP to provide direct project services specific to project inputs according to its policies and convenience. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. UNDP and the GoCD acknowledge and agree that these services are not mandatory and will only be provided in full accordance with UNDP policies on recovery of direct costs.

Audit

204. The project will be audited in accordance with the UNDP Financial Regulations and Rules and applicable audit policies. An audit to the Project is an integral part of UNDP financial and administrative management within the framework of UNDP's accountability, internally and with regards to the GEF.

205. The project will be audited to ensure that resources are administered in accordance with the financial regulations of the project document, work plan and budget. The project's budget should contemplate the resources needed to carry out the audit. The firm selected by UNDP Barbados, through a bidding process and subjected to a rigorous evaluation within the principles of transparency, neutrality and cost benefit, will take over this exercise in accountability.

Communications and Visibility Requirements

206. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at http://intra.undp.org/coa/branding.shtml and specific guidelines on UNDP logo use can be accessed at: http://intra.undp.org/branding/useOfLogo.html

207. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/GEF_logo. The UNDP logo can be accessed at http://intra.undp.org/coa/branding.shtml.

208. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF

Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08_Branding_the_GEF%20final_0.pdf.

209. The GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

210. Where other agencies and project partners have provided support through co-financing, their branding policies and requirements should be similarly applied.

Administrative Arrangements

211. The project will be financed by the GEF with a total amount of US$1,707,306. The GoCD will contribute US$7,400,000 and UNDP Barbados and the OECS Subregional Office will contribute US$300,000 as co-financing to the Project. These resources will be used primarily for salaries, training, equipment, programs and subsidies, and basic operation and management expenses associated with the execution of the components of this project. To ensure effective utilization of the resources assigned to this project, in particular GEF funds, UNDP will make its competent financial machinery available. The UNDP office (project coordinator and financial staff) will further ensure transparent and prompt delivery of services provided to the project by UNDP and in accordance with its internal guidelines and regulations.

TECHNICAL ASSISTANCE

212. Short-term national as well as international technical assistance will be provided by the Project, on a consultancy basis, in order to overcome barriers and achieve the project outputs/outcomes. Technical assistance will be directly contracted by the PSC, through a transparent procurement process (i.e. the development of Terms of Reference and recruitment) following UNDP regulations and will directly assist the implementing entities and report to the Project Steering Committee. Many of the project components are innovative and need some level of consultancy input. These include issues such as: Landscape planning, PA Economics, Business Plans, Institutional Capacity Building, Gap analysis and Climate change adaptation strategies, etc. Where needed these local consultancy inputs have been identified and budgeted.

PART IV: Monitoring and Evaluation Plan and Budget

Monitoring and reporting[21]

213. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures. The UNDP Country Office (UNDP-CO) with support from UNDP/GEF regional office in Panama will guide the process. The project performance will be monitored and evaluated according to the Project Results Framework (log-frame) in Section II, Part I. This Results Framework will be finalized at the Project Inception Workshop with special emphasis on the indicators and means of verification. Indicative cost estimates for the M&E along with the project staff responsibility in the M&E process will also be finalized.

214. The project will be monitored through the following M&E activities. The M&E budget is provided in Table 5.

[21] As per GEF guidelines, the project will also be using the BD 1 Management Effectiveness Tracking Tool (METT). New or additional GEF monitoring requirements will be accommodated and adhered to once they are officially launched.

PROJECT START

215. A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

216. The Inception Workshop should address a number of key issues including:

(i) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.

(ii) Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.

(iii) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.

(iv) Discuss financial reporting procedures and obligations, and arrangements for annual audit.

(v) Plan and schedule Project Board meetings. Roles and responsibilities of all project organisation structures should be clarified and meetings planned. The first Project Board meeting should be held within the first 12 months following the inception workshop.

217. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

QUARTERLY

218. Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform. Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).

219. Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot.

220. Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

ANNUALLY

221. Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

222. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual).

- Lesson learned/good practice.
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS QPR
- Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

PERIODIC MONITORING THROUGH SITE VISITS

223. UNDP-CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.

MID-TERM OF PROJECT CYCLE

224. The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation (insert date). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP-CO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).

225. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

END OF PROJECT

226. An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

227. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).

228. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

229. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

LEARNING AND KNOWLEDGE SHARING

230. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

231. 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 project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

232. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

Table 5: Project Monitoring and Evaluation Plan and budget

Type of M&E activity	Responsible Parties	**Budget USD** *Excluding project team Staff time*	Time frame
Inception Workshop and Report	Project Manager UNDP-CO UNDP GEF	Indicative cost $4,000	Within first two months of project start up
Measurement of Means of Verification for Project Purpose Indicators	UNDP-GEF RTA and Project Coordinator will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalised in Inception Phase and Inception Workshop	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress and Performance on *output and implementation* (measured on an annual basis)	Oversight by Project Coordinator Project team	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR and PIR	Project manager and team UNDP CO UNDP RTA UNDP EEG	None	Annually
Periodic status/ progress reports	Project team and team	None	Quarterly
Mid-term Evaluation	PACU UNDP-CO UNDP RCU External Consultants (i.e. evaluation team)	Indicative cost: $12,000	At the mid-point of project implementation.
Final Evaluation	PACU UNDP-CO UNDP RCU External Consultants (i.e. evaluation team)	Indicative cost: $15,000	At least three months before the end of project implementation
Terminal Project Report	PACU UNDP-CO local consultant		At least three months before the end of the project

Type of M&E activity	Responsible Parties	Budget USD *Excluding project team Staff time*	Time frame
Audit	UNDP-CO PACU and project team	Indicative cost per year: 6,000 x 3 = 18,000	Yearly
Visits to field sites	UNDP Country Office UNDP RCU (as appropriate) Government representatives	For GEF supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST **Excluding project team staff time and UNDP staff and travel expenses**		**USD 49,000**	

PART V: Legal Context

233. Standard text has been inserted in the template. It should be noted that although there is no specific statement on the responsibility for the safety and security of the executing agency in the SBAA and the supplemental provisions, the second paragraph of the inserted text should read in line with the statement as specified in Standard Basic Assistance Agreement (SBAA) and the supplemental provision, i.e. "the Parties may agree that an Executing Agency shall assume primary responsibility for execution of a project."

234. This document together with the Country Program Action Plan (CPAP) signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing agreement] and all CPAP provisions apply to this document.

235. 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.

236. The implementing partner shall:

(i) 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;
(ii) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

237. 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 this agreement.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the 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/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

SECTION II: Strategic Results Framework (SRF) and GEF Increment

PART I: Strategic Results Framework

238. The objective of this project is strategically linked to outcome one (1) of the United Nations Development Assistance Framework (UNDAF) and the Sub-regional Program Document for Barbados and the OECS (2012-2016) both of which speak to Enhanced capacity of national, sub-regional and regional institutions and stakeholders to effectively manage natural resources. Further, Result 3 of the SPD requires that Knowledge and good practices be disseminated and capacity developed in the areas of natural resource management; this is again envisioned in this project. The GEF Strategic Objective BD 1, the area of emphasis in this project, calls for improving the sustainability of Protected Area System that is the central theme of this project.

Project Results Framework

Table 6: Project Results Framework

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP # 1: Enhanced capacity of national, sub-regional and regional institutions and stakeholders to: effectively manage natural resources; build resilience to the adverse impacts of climate change and natural and anthropogenic hazards; improved energy efficiency and use of renewable energy; improved policy, legal, regulatory and institutional frameworks for environmental and energy governance.
Country Programme Outcome 1 Indicators: Percent of budget allocated to environmental protection; hectares of forest cover; greenhouse gas emissions per capita; number of updated and tested contingency plans; volume of savings from reduced fossil fuel imports; multilateral environmental agreements incorporated into national legislation; energy efficiency and renewable energy policies.
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Solutions at local level for sustainable management of natural resources, ecosystems and environmental services, for expanded jobs and livelihoods; and *3.5.* Transparent and non-discriminatory legal and regulatory frameworks and policies enabled for sustainable management of natural resources, biodiversity and ecosystems (in line with international conventions and national legislation) 2. Unlocking the potential of PAs, including indigenous and community conserved areas, to conserve biodiversity while contributing to sustainable development
Applicable GEF Strategic Objective and Program: BD 1 Improve the sustainability of Protected Area Systems
Applicable GEF Expected Outcomes 1.1: Improved management effectiveness of existing and new protected areas
Applicable GEF Outcome Indicators: Buffer zone developed around protected area improving protected area by 2,030 ha.

Outcome	Indicator	Baseline	Targets at end of Project	Source of verification	Risks and Assumptions
Project Objective: To demonstrate a model for effective integrated landscape management encompassing the strengthening of an existing protected area (Morne Trois Pitons National Park) and establishment of its buffer zone in order to reduce threats to biodiversity and ecological functioning					
Component 1: Strengthening the core zone management of Protected Areas at systemic level and scale up innovative interventions at core zone of selected PAs to improve Sustainability					
Outcome 1. (Activity in Atlas) Biodiversity Assessment, monitoring and conservation. Develop approve and operationalize management plan for MTPNP	Monitoring and assessment plan. Persons trained to carry out assessment Improve METT scores of MTPNP and other targeted PAs A legally recognized management structure with guidelines;	• Revised National Biodiversity Assessment and 5th National Report on Biodiversity available. • Current METT scores for MTP is 59 • Draft management plan available but not in use	• Annual biodiversity reports used in decision making in Agriculture and planning. Conservation strategies being implemented. • Target METT score at end of project 75 • Implementation of approved management plan; 75% of staff (recommended in plan) hired. Improved financial and technical management.	• National Biodiversity reports available. • Management effectiveness Tracking Tool (METT) prepared at mid-term review and terminal evaluation • Management plan in document form available	• Decision makers approve the management plan
2. Resource MTPNP management. Develop Operational Capacity. Develop and implement surveillance plan to control hunting, and	A financial plan and trained staff to implement the plan. Increased financing in place to address the sustainability of the NP as measured by the UNDP Financial Scorecard. Increased area of MTP NP from 6,342 ha to	• Existing management plan lack resource component; need to be revised and updated. • Core zone legally recognized and protected. A 200 m Buffer zone around MTP NP proposed • To be developed during first year of project cycle	• Dedicated financing for MTP NP identified and applied. • At least 530 ha added as buffer zone within existing park. • Staff adequately trained by the end of year two. • BD threat minimized and illegal actions reduced by	• Financial report from PA operations • Physical maps of Dominica showing new boundaries • Staff list showing performance levels and financial reports. • Training reports surveillance records	• Private land owners in the proposed buffer zone agree to the terms of the project as it pertains to land use and management

Outcome	Indicator	Baseline	Targets at end of Project	Source of verification	Risks and Assumptions
harvesting of wild plants and animals, land clearing and tilling on slopes >15%, and land development.	8, 372 ha including buffer zone (530 ha within and 1500 ha outside). Trained staff managing 8,372 ha of integrated land scape (MTPNP core and buffer zone) No of MTP NP staff with specialized training in surveillance techniques resulting in reduced incidences of fires, hunting and tilling on slopes >15% in buffer zone.	• Park wardens currently perform spot checks, no systematic monitoring	70 % by year 4. Surveillance, monitoring and fire management programme developed and implemented. • Reduced erosion	• Capacity Development Scorecard prepared at mid-term review and terminal evaluation	
3. Establish PA coordinating Unit. Strengthen PA policy. Develop PA legislation. Improve financial stability of PA. Develop PA system plan.	PA management Unit staffed with trained staff. PA Management capacity strengthened PA controls established PA legislation approved and registered PA management adequately financed Improved coordination among PA site	• PA managed by staff of Forestry that will be upgraded to PA unit • PA management scorecard rating at 67% • Draft policies with no regulations. • PA designation legislation in place but management issues missing • User fees are in place but management very weak • PA units are independently managed with different standards	• PA Unit in place with adequate staff and finance. • PA management scorecard rating improved to 85% • PA policies with regulations approved and enforced. • PA legislation registered and enforced • Sustainable Finance plan. PA generating 100% of its financial needs. • A coordinate PA systems plan with legal and financial considerations	• PA unit office with equipment and staff • Management scorecard available • Policy document available • Document available with registration number. • Financial management plan. PA audit report • Financial Sustainability Scorecard prepared at mid-term review and terminal evaluation	• Approval given for PA system to manage its finance with supervision from Ministry of Finance.

Outcome	Indicator	Baseline	Targets at end of Project	Source of verification	Risks and Assumptions
Consolidate PA information system. Develop financial sustainability strategy. Standardized administrative and financial processes in co-management arrangement	A single database and information system for Dominica's PA PA financial plan Functional Co-management arrangement	• Ministry of Tourism provides site specific information. • PA sites generate finance but unsustainable • Community organizations have an umbrella organization but no connection to existing PA management authorities	• A unified information system and database • PA financing strategically managed; funds collection and used efficiently. • A functional co-management arrangement between stakeholders	• Systems plan document available • Data dissemination through information System • Strategy document available • Documented management arrangement and financial plan	• A stakeholder agreement that meet everyone's approval.
Component 2: Establish and manage Buffer Zone as a key component of National Protected Area System and select experiences to be scaled up beyond the buffer zone					
Outcome 2 (Activity in Atlas) 1. Establish an Inter-sectorial committee for the management of integrated PA landscapes (2,030 ha buffer zone). Identify and define boundaries of buffer zone Legally establish buffer zone as managed landscape with restrictions on hunting,	A legally constituted inter-sectorial committee with mandate and authority for Pa management. 2,030 ha of buffer zone marked on maps Approved Buffer zone Legislation supports zero hunting, charcoal burning and road development.	• Responsible agencies exist but no coordination practiced. • Preliminary buffer zone identified in studies but not established or approved	• Committee established and functioning using management plan (Component 1) • 1,500 ha of buffer zones outside the existing PA boundary identified, demarcated and mapped. • Legislation governing buffer drafted and approved. 2,030 ha of	• TORs for agency representatives on inter-sectorial committee. • GIS map showing buffer zone available	• Private land owners agree to management policy. • The degree of restriction to which private land owners

Outcome	Indicator	Baseline	Targets at end of Project	Source of verification	Risks and Assumptions
charcoal burning, tilling on slopes > 15% and infrastructure development Demark sites in the buffer zone with signpost	Sign posts in place around buffer	• Landscape around buffer-zone managed in an ad hoc way with some charcoal burning, hunting, land tilling on slopes and building construction • Conceptual boundary advanced but not approved or marked	buffer zone under active management; greater limits on hunting and development, prohibition of charcoal burning and tilling on slopes > 15%. • Buffer zone legally established and demarcated	• Legislation published in gazette • Legal instrument establishing Buffer zone.	will agree is uncertain • Private land owners agree to function within a buffer zone context
2. Support CRMP Develop land tenure and compensation review process Expand the scope of current outreach program for farmers	Environmental and land use standards for development in buffer zones. Land tenure review process in place. Number of farmers helped by outreach program increased, disaggregated by age and gender	• EIA for select development activities required by Physical Planning Department • Least arrangement exists for use of state lands. • Ministry of Agriculture has an outreach to farmers (extension program)	• Operating standards and guidelines in place for development of livelihood activities in buffer zone. • Clear and acceptable review process for land tenure • 100% of persons farming in and around buffer zone supported by outreach program and adhere to land use restrictions – no charcoal burning, no tilling on slopes >15 %, no land conversion to road.	• Published EIA standards for buffer zone. • Land tenure model document • Farmers practicing skills received from outreach program	• State approves use of land for agriculture

Outcome	Indicator	Baseline	Targets at end of Project	Source of verification	Risks and Assumptions
3. Develop 4 Community resource management plans Engage local residents within buffer zone in livelihood activities Strengthen Community organization capacity to effectively manage the buffer zone. Community based education program	Vulnerability Atlases for **4** communities listed Livelihoods activities in buffer zone confirms to land use restrictions: no hunting, no tilling on slopes > 15%, no clear cutting and no charcoal burning policy. Number of persons trained in BD friendly agriculture and land management practices, disaggregated by age and gender Stakeholder awareness of project progress and PA management strategy. Information on management controls – no burning of charcoal, no tilling on slopes >15%, zero land conversion to road disseminated on all media.	• Community Vulnerability Atlas for 10 communities exist**s.** • Unregulated farming in parts of the buffer zone. • Agriculture practice in proposed buffer zone is unsustainable (include clear cut and burning) • ECU has ongoing environmental education in schools and community	• Four community resource management plans developed and 50% implementation. • All farmer in buffer zone practice BD friendly agriculture • All Stakeholders in buffer zone involve in management (co management) 100% Buffer zone effectively managed- no charcoal burning, no road construction or tilling on slopes > 15% • 70% of Dominicans supporting PA agenda • All Dominicans knowledgeable about and practice controls on charcoal burning, harvesting and hunting restriction.	• Community resource management plans approved by Ministries and available. • Manual on BD management available, Organic fertilizer available to farmers in buffer zone. • Organic farming and GAP standards practiced in PA • Documents and media program	

PART II: Incremental Cost Analysis

BENEFITS AT THE GLOBAL, NATIONAL AND LOCAL LEVEL

239. Dominica has the most extensive natural forests in the entire Eastern Caribbean and is home to the most diverse assemblage of wildlife among the smaller Caribbean islands. This rich biodiversity is located mainly in the national parks and forest reserves. GEF funding will secure protection to critically important biodiversity; some endangered, some endemic and others of great economic value. Activities funded by the GEF will deliver global benefits through the strengthening of MTPNP by the establishment and legal designation of a buffer zone, development of a functional protected area system plan and management unit which together will enhance critical ecosystems and habitats. Effective management of these PAs (20% of Dominica land area) will ensure the sustainability of a significant tract of forest that is largely responsible for Dominica having a net negative GHG emission. In essence, this is an effective carbon sink of global significance. In addition to the effective removal CO_2, Dominica's PAs might hold the secret cure for some diseases plaguing the world. There is an active research programme in the forest of Dominica. In in 2012 there were ten (10) international agencies (universities and pharmaceutical companies) doing research in the forest. Between 2009 and 2012 twenty-five (25) licenses were issued to international organizations from the US, Canada, Europe and the Caribbean to conduct research in the forest (PA) of Dominica. The improved land/seascape management over a large geographical area will safeguard soil and water resources on the islands, increase carbon stocks and protect biodiversity.

240. The proposed project will have various socioeconomic benefits for the citizens of Dominica; contributing to the goal of enhancing the quality of life for a nation that has been challenged in recent years by natural disasters, a declining agricultural sector and high levels of unemployment. Protection of Dominica's upland biodiversity rich forests will further contribute to the conservation of flora and fauna. Dominica is particularly vulnerable to the effects of climate change due to its steep slopes and shallow soils, improved forest management will reduce Dominica's particular vulnerability to erosion and downstream sedimentation. As with most SIDS, the entire country is considered a coastal zone, with its farmlands and coastal ecosystems particularly threatened with degradation from erosion and sedimentation (coral reefs, mangroves, seagrass beds, beaches, etc.). Protection of upland forests within the MTPNP will produce widespread benefits by increasing the country's resilience to climate change impacts, including food security and livelihoods. In areas adjacent to and upstream of the MTPNP and within the park's buffer zone (through improved management and regulation of activities), reducing soil erosion, flooding and conserving ecosystem functions will serve to maintain agricultural and forest product-related livelihoods.

241. Maintaining the intact forest cover on the slopes of the MTPNP will help maintain coastal zone integrity, supporting fisheries and associated livelihoods, reducing the deleterious effects of erosion and sedimentation on marine biodiversity and fishing yields. In addition, this project will use GEF funding to support the work of DOAM in the production and use of organic fertilizers (Activity 2.3.2) thus reducing the current chemical and fertilizer deposits in the coastal zone. Increased use of organic fertilizers will also protect biodiversity and humans from their deleterious effects associated with chemical fertilizers. Increased sustainable land use practices and improved livelihoods will further reduce pressures on the natural resources within the park boundaries and the forested slopes outside the park's boundaries.

242. The intact forest cover provided by the MTPNP provides ecosystem services to the island ranging from watershed protection to soil conservation. Protecting MTPNP ensures a continuous source of potable fresh water for Dominica. Vegetation cover influence contributes more to erosion mitigation than any other factor through a dual role of soil and water conservation. Dominica has abundant water resources through its numerous rivers and streams and these sources of water have minimized the need to explore groundwater sources. Surface water is the only source of water used by Dominica's water department (DOWASCO) for potable water supply and dams are built on rivers to store water. There are 12 watersheds that originate in the MTPNP. Eight (8) water systems that emanate from the park are used by DOWASCO, including the 3,172.5 ha Roseau Watershed, which supplies over 40% of the country's population with water. There are also plans for the WA-1 Water Supply Augmentation for the River Claire, Boeri River and Fresh Water Lake catchments. Out of the total potable water produced by DOWASCO, 3.24 imperial million gallons per day (imgd) is supplied for public water supply, 2.5 imperial million gallons per month for water supply to cruise ships and 6.0 imgd as bulk water. Currently Dominica exports fresh water and supplies water to the many ships visiting its ports.

243. The communities in close vicinity to the National Park invariably directly rely on the regulatory function of the surrounding forested ecosystems to maintain watersheds and mitigate flood and erosion impacts. A total of 28 communities are located around the Park with a total area of 109.8 miles^2 and a total population of 8,666 persons, approximately 12% of the population of Dominica, which are served by water produced from the park. As DOWASO is under no obligation to supply water for agriculture, water emanating from the park's watersheds and rivers is used to support agriculture in its buffer zones.

244. The rivers of Dominica also support the generation of hydroelectricity thus contributing to improved social life of Dominicans occasioned by reliable and cheaper source of energy. Dominica Electricity Company Ltd. (DOMLEC) currently operates three (3) hydro stations on the Roseau River Watershed with an average yearly output estimated at 27GWh that constitute approximately 30% of national production.

245. Other socioeconomic benefits derived from Dominica's PA include forest products (timber and non-timber), meat products, and tourist recreation. Its rivers are an important source of protein to the Dominican people in addition to the recreation they provide. In all cases there is no gender disparity. Both male and female harvest the forest, work as tour guides and utilize the water resource with equity. Dominica has taken major steps towards improving the quality of life of men and women, at all levels of society and towards supporting gender awareness among all stakeholders through the adoption of a gender equality policy and strengthening capacities and coordination among government agencies in order to mainstream gender in development programmes. This project will support Dominica's efforts, by helping to stabilize ecological and social processes at the landscape level, and by promoting the generation of economic benefits through sustainable production systems. These benefits will help underpin the structures and internal dynamics of natural resource-dependent farm families, as well as generate specific income and employment opportunities for women who are often the primary caregivers in the family, thus particularly benefitting single female heads of households. The project will also take advantage of and contribute to the well-established provisions for women's participation in decision-making structures at the levels of community and local government.

246. A system of protected areas with an integrated framework of PA policy, legislation and management and strengthened institutional capacity will further protect the forests of the MTPNP and ultimately the socio-economic benefits derived from protection of natural resources island-wide. A buffer zone around

the MTPNP will have a regulatory framework and implement inter-institutional and stakeholder collaborative management that will also support future buffer zones designation and further strengthen sustainable land uses in buffer zones elsewhere on the island. Strengthened PA legislation will also increase terrestrial habitat and biodiversity protection, and reduce pressures on intact forests both within and bordering the NP. Through supporting alternative livelihoods in the buffer zones and beyond, local inhabitants will be able to sustainably harvest forest products, but more importantly, it will provide diversified opportunities for agricultural production in the wake of the declining banana industry and the loss of agricultural production from the effects of recent hurricanes and natural disasters. In addition, alternative livelihoods associated with the strengthening ecotourism industry targeting Dominica's forests will also provide increased direct income generation for local communities through eco-tourism employment at nature sites within the park as well as opportunities in forests bordering the park. Participatory PA management activities will include maintenance, monitoring and research, and the sale of souvenirs, food, and craft products that will, along with agriculture, be supported through community-based trainings. By increasing the participation of local community members in PA management related activities, and by demonstrating the link between forest conservation and increased livelihood / income generation, PA support will benefit island-wide. Generation of these socio-economic benefits for residents in areas adjacent to MTPNP and/or persons who rely directly on PA resources and / or improved income from visitation will increase local support for PA conservation.

247. Women and youth will be particularly targeted as fundamental stakeholders of the project, through their involvement in the design and implementation of capacity building and awareness programmes, to ensure their equitability and sustainability. Special attention will be paid to gender issues in developing socio-economic indicators, and Dominica's National Council of Women will be engaged to help ensure women are targeted and supported through the Project's agricultural and other livelihood initiatives. Socio-economic related activities will seek to build on existing information on the actual benefits women and disadvantaged communities can draw from ecosystems, with education and outreach targeting the opportunities and socio-economic benefits to the buffer zone communities in maintaining ecosystem health and the benefits provided by the ecosystem services generated from the MTPNP. In addition, individual capacities will be strengthened, producing social capital that will benefit community initiatives in other spheres (e.g. health, education).

Table 7: Incremental Cost Matrix

Cost Benefit	Baseline	Alternative	Increment
Global Benefits	Currently, Dominica's system of PAs has a rich biodiversity resources base, natural phenomena that are world renown, some legislation and staff but no buffer zone and no institutional structure for management. Under these conditions, encroachment into the park will continue, the rivers and streams may	This project will remove major barriers to PA management by supporting the development of an effective management system with proper financial structures making PAS financially sustainable. The management structure will also address legal boundaries for both the Parks and the Buffer zones and clearly defined roles and responsibilities for	The GEF increment will strengthen protection for regional and globally significant biodiversity in Dominica through strengthened protection of the MTPNP and its biodiversity. In addition, the project will carry out a biodiversity assessment that will form the basis for biodiversity monitoring and to inform future conservation actions for threatened, endangered and native species within the MTPNP and forested lands outside its boundaries.

Cost Benefit	Baseline	Alternative	Increment
	become polluted, endangered species can disappear putting the world heritage site MTPNP at risk and threatening Dominica's tourism product which is built around these resources. The nature sites within and outside the PAs also suffer from lack of institutional structure and adequate human and financial resource to maintain the infrastructure needed to make them assessable to visitors. Uncontrolled human activity in the forests will negatively impact research opportunities, water supply, the biomass of the forest and consequently its carbon sequestration ability.	stakeholders. The capacity development component of this project will improve the livelihood options for persons living in and around the buffer zone. Coordination of activities around PAs will help to rationalize visitor site selection thus taking pressure off premium sites and increase their sustainability. The GEF investment will enable the establishment and operationalization of a co-management system for PAs thus bringing women, youths and indigenous peoples into the management structure and increasing their earning potential in keeping with the national biodiversity goal of equitable benefit sharing. Strengthened controls on human activities within MTPNP, including elimination of hunting, harvesting of wild plants, zero land conversion or road construction. Land use guidelines would be put in place and enforced in MTPNP buffer zone, including controls on hunting, harvesting of wild plants, prohibition on charcoal burning, use of fire to clear land, greater limits on development (i.e. housing, roads, other infrastructure), strengthened EIAs for new developments. 6,875 hectares (Morne Trois Pitons NP) + external buffer (size to be determined based on studies carried out through the Project) zone will be under integrated landscape-level management and the authority of inter-sectoral committee for the management of the integrated PA landscapes	The GEF increment will strengthen protection of critically important biodiversity on Dominica. Activities funded by GEF will deliver global benefits through the strengthening of the target terrestrial protected area, the Morne Trois Pitons National Park, a UNESCO World Heritage Site and a Bird Life International designated Important Bird Area and Endemic Bird Area. The GEF increment will also deliver global benefits through the development of a system of protected areas, strengthening protection of ecosystems, habitats and critical ecosystem services over 20,380 ha. Global benefits derived from strengthened conservation of the habitat at the MTPNP of the of IUCN listed species include the Endangered endemic *Amazona imperialis*; Vulnerable endemic *Amazona arausiaca*; Regional endemic Vulnerable Forest Thrush *Turdus lherminieri*, Endangered Black capped Petrel *Pterodroma hasitata*, (possible nesting accounts), all 19 of the Lesser Antilles EBA restricted range birds for Dominica, including the Blue-headed Hummingbird *Cyanophaia bicolor* occuring just on Dominica and Martinique, and Plumbeous Warbler *Dendroica plumbea* which is shared only with Guadeloupe. Four (4) species of bats found in the Park all are Lesser Antillean endemics; the IUCN VU Mouse-eared bat *(Myotis dominisensis),* the Lesser Antillean tree bat (*Ardops nichollsi*), the Lesser Antillean long-tongued (*Monophyllus plethodon)* and the Antillean cave bat *(Brachyphylla cavernum).* The GEF increment will further protection of three (3) species of frogs that include one (1) Endangered single-island endemic *Eleutherodactylus amplinympha* that is restricted to higher elevations on Dominica, and two regionally endemic species, the Near Threatened *Eleutheordactylus martinicensis* and the Least Concern *E. Johnstonei*. The Critically Endangered *Leptodactyllus fallax* is currently not documented for the park. The Endangered *Iguana delicatissima*, endemic to only a few islands of the

Cost Benefit	Baseline	Alternative	Increment
		Management plan will be developed and implemented for MTPNP that will include operational capacity established for surveillance and enforcement; fire management; and visitor management. Management plans will be developed for all designated protected areas (marine and terrestrial) that will be integrated into the development of a System Plan for Protected Areas. Biodiversity protection will be further enhanced through activities that include a biodiversity assessment and target biodiversity conservation programmes filling knowledge gaps for the MTPNP, improving conservation of target species and identifying status of existing species to inform species management and conservation action. Specific biodiversity conservation actions will be carried out for IUCN listed species, including (1) *Amazona arausiaca* Vulnerable; (2) *Amazona imperialis* Endangered endemic; (3) Mountain Chicken *Leptodactylus fallax* Critically Endangered; (4) Forest Thrush *Turdus lherminieri*, Regional endemic, Vulnerable; (5) Black capped Petrel *Pterodroma hasitata*, Endangered (possible nesting accounts); and Laurier de rose species *Phoebe elongata* Lòwyé di-wòz (determine status). Assessment and management options to address pathogens	Lesser Antilles, is found within the park as is one (1) of Dominica's two (2) other endemic lizards, the *Anolis oculatus*. While the *Ameiva fuscata* inhabits dry coastal woodlands and scrub below 300m, the *Anolis* is found in most forest types, including the MTPNP. Two (2) species of geckos, the endemic *Sphaerodactylus vincenti* (LC) and the widely distributed (Mexico southward into South America) *Thecadactylus rapicauda*, are found in the rainforest leaf litter and in secondary lowland forest within the park. The Endangered Lesser Antillean Iguana *(Iguana delicatissima)* is endemic to a few islands of the Eastern Caribbean, from Anguilla to Martinique will also be afforded increased protection, as will four (4) species of snakes, one (1) Vulnerable freshwater species (Tarpon *Megalops atlanticus*) (VU), and some of the 11 species of freshwater shrimp. The twenty (20) known species of butterflies found in the park will be afforded strengthened protection, including at least one species of the *Lycaenidae* family, the Monarch *(Danaidae)* and possibly the endemic *Diapheromera saussurei.* Strengthened protection within the park and the forests surrounding the site will further limit erosion and downstream sedimentation issues, positively affecting globally threatened marine species. Development of a System of Protected Areas carried out through this project will further strengthen protection of sites outside the direct scope of this project. These activities will ultimately positively affect protection of additional terrestrial and marine biodiversity of global significance that is found beyond the borders of the Morne Trois Pitons National Park, including the Critically Endangered *Acropora ervicornis* (Staghorn Coral) and *Acropora palmata* (Elkhorn Coral), the Endangered *Montastraea annularis* (Boulder Star Coral), and the Vulnerable *Agaricia amarcki* (Lamarck's Sheet Coral). Dominica's butterflies can be further protected, including the

Cost Benefit	Baseline	Alternative	Increment
		(Chytridiomycosis killing the CRMountain Chicken) and invasive species (lemongrass, tilapia in lakes) will be addressed to limit decline of native and threatened species. In addition, biodiversity within MTPNP and the forests outside MTPNP boundaries will be further strengthened through the legal designation of buffer zones around major protected areas (MTPNP) and improved alternative sustainable livelihood activities that will reduce unsustainable use of, and pressures on, forest resources. The buffer zones will be demarcated and mapped and persons living around buffer zones or extracting their livelihoods in these zones will receive training to be able to establish living landscapes thus live in harmony with the resource.	Endangered endemic *Libytheana fulvescens* (Snout butterfly) and the endemic *Electrostrymon dominicana (*Dominican Hairstreak), as well as Dominica's chiropteran fauna such as *Myotis dominicensis* and 2 subspecies *Ardops nichollsi nichollsi* and *Sturnira lilium angeli* that are endemic to the island. There will be increased strengthened habitat protection for both single island endemic *Amazona* parrots, Dominica's unique plants including the Critically Endangered *Phycolepidozia exigua,* and the Endangered *Nectandra krugii, Swietenia mahagoni, Pouteria pallid, Guaiacum officinale,* and 6 other Vulnerable plant species as well as the many other species of global significance outlined in this report. The rate of soil loss within the MTPNP and the surrounding forest's watersheds will decrease, and other ecosystem services, particularly the provisioning of water, will be maintained. GEF resources will be used to improve the management of the PAs, improve revenue generation thus enabling the PAs to become financially sustainable; financial sustainability translates into adequate staff to perform biodiversity monitoring, surveillance guarding against fires and illegal activities in the PAs. In an improved functioning state, Dominica's protected areas will deliver expanded and improved global benefits.
National and Local benefits	Under present conditions, encroachment into protected areas will continue and may even accelerate. Housing development on forest borders (private lands) put pressure on the biodiversity within the parks due to noises, reflection, vehicular traffic, increased pedestrian traffic into	This project will engage a wide cross section of stakeholders in planning, development and utilization of community vulnerability atlases for four communities located in or around the buffer zone. They will work with the GIS unit in the Physical Planning department in preparing the maps. In this way they will become intimately involved in mapping and boundary	The GEF increment will support institutional strengthening and capacity building for long-term viability of key island resources and ecosystem services, particularly the biodiversity rich MTPNP from which eight (8) of Dominica's water systems emanate. This water is used to generate hydro-electricity, support agriculture, meet domestic needs and support biodiversity. This project is expected to yield additional national and local benefits by creating livelihood opportunities for persons living in the

Cost Benefit	Baseline	Alternative	Increment
	the forest and pollution from fires, chemical sprays and improper garbage disposal. Encroachment and its consequences will cause loss of forested area and exposure of steeps slopes to erosion resulting in landslides and extensive land degradation. The land degradation will cause siltation in the rivers and coastal sea and an accompanying loss of biodiversity and associated livelihoods. As resources are depleted, livelihood challenges will become more difficult and wide-spread. Tourist come to Dominica primarily to see nature at work; the destruction envisioned without this project will have serious economic consequences for the entire island – the National Treasury, taxi drivers, tour operators souvenir shops, park vendors and wardens. Damage to the forest that serves as watershed will result in reduce water quality and quantity which in turn will impact hydroelectric generation and the attending social services	demarcation in their specific location. Vendors at nature sites within and around protected areas will also be involved in site layout design and development. In this way the communities and individuals currently posing encroachment challenges to the PAs will become part of the solution functioning as guardians of the resource. Stakeholder involvement will ensure that their concerns are addressed and that they understand and appreciate the value of PAs and what is required to maintain them. A functional Protected Area management plan with supporting institutional structure and adequate staff will strengthen conservation efforts, reduce land degradation and improve product quality and sustainability.	proposed buffer-zone and who eke out their existence from the park/forest. The project will improve the farming skills and techniques of farmers living and farming on the park borders. Existing women groups will be particularly targeted for capacity building to improve their livelihood options. With improved management, Dominica's PA will become a source of sustained financing that will support resource conservation, provide employment opportunities and reduce soil erosion, coastal sedimentation and resource degradation.

SECTION III: Total Budget and Work plan

Award ID:	00082944	**Project ID**	00091618
Award Title:	Commonwealth of Dominica: **Supporting Sustainable Ecosystems by Strengthening the Effectiveness of Dominica's Protected Areas System**		
Business Unit:	BRB10		
Project Title:	**Supporting Sustainable Ecosystem by Strengthening the Effectiveness of Dominica's Protected Area System**		
PIMS no.	**5089**		
Implementing Partner (Executing Agency)	Environmental Coordinating Unit (ECU), for Government of Dominica		

GEF Outcome/Atlas Activity	Responsible Party/ 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)	Total (USD)	See Budget Note:
Component 1. Strengthening the core zone management of Protected Areas at a systemic level and scale up innovative interventions at core zone of selected PA to improve sustainability	**ECU**	**62000**	**GEF**	71200	International Consultants	$271,250	$247,750	$39,500	$37,500	$596,000	1
		62000	**GEF**	71300	Local Consultants	$108,473	$113,223	$67,223	$67,223	$356,142	2
		62000	**GEF**	71300	Local Consultant	$30,000	$30,000	$10,000	-	$70,000	3
		62000	**GEF**	72200	Equipment and Furniture	$56,000	$20,000	-	-	$76,000	4
		62000	**GEF**	72400	Communication and Audio visual Equipment	$8,500	$5,000	$5,000	-	$18,500	5
					sub-total GEF	$474,223	$415,973	$121,723	$104,723	$1,116,642	
					Total Outcome 1	**$474,223**	**$415,973**	**$121,723**	**$104,723**	**$1,116,642**	
Component 2. Establish and	ECU	62000	GEF	71200	International Consultants	$54,000	$29,000	$20,000	-	$103,000	6

manage buffer zone as a key component of National Protected Area System and select experiences to be scaled up beyond the buffer zone. (Monitoring, Adaptive Feedback & Evaluation)		62000 62000 62000	GEF GEF GEF	71300	Local Consultants	$30,000	$26,688	$31,063	$21,500	$109,251	7
				72300	Materials and Goods	$38,333	$38,333	$48,334	$32,000	$157,000	8
				71600	Training	$10,000	$10,413	-	-	$20,413	9
					sub-total GEF	$132,333	$104,434	$99,397	$53,500	$389,664	
		62000 62000 62000	GEF GEF GEF	75700	Training	$4,000	-	-	-	$4,000	10
				74100	Professional Services	-	$6,000	$6,000	$6,000	$18,000	11
				71200	International Consultant	-	$12,000	-	$15,000	$27,000	12
					Sub-total M&E	$4,000	$18,000	$6,000	$21,000	$49,000	
					Total Outcome 2	**$136,333**	**$122,434**	**$105,397**	**$74,500**	**$438,664**	
Project Management				71400	Contractual Service Individual	$25,000	$25,000	$25,000	$25,000	$100,000	13
				74598	UNDP Cost Recovery Charge Bills (Direct Project Cost)	$13,000	$13,000	$13,000	$13,000	$52,000	14
					sub-total	**$38,000**	**$38,000**	**$38,000**	**$38,000**	**$152,000**	
					Total Project Management	$38,000	$38,000	$38,000	$38,000	$152,000	
PROJECT TOTAL						**$648,556**	**$576,407**	**$265,120**	**$217,223**	**$1,707,306**	

Summary of Funds:[22]

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Total
GEF	$655,056	$594,907	$258,120	$199,223	$1,707,306
Donor 2: Ministry of Agriculture (in-kind)					$1,200,000
Donor 3: Ministry of Tourism (Cash)					$1,200,000
Donor 4: Ministry of Health and the Environment (in kind)					$ 5,000,000
Donor 5: UNDP					$ 300,000
TOTAL	$	$	$	$	$9,407,306

Budget Notes	
1	Regional and International consultants (approximately 250 days over 4 years) to develop PA management plan and other planning process tools; write PA system business plan and conduct training in financial management; develop SOP for PA management; establish criteria for assessment and designation of terrestrial and marine PAs, (150,000). Work with Forestry Division and local consultants over 2 years (120 days) to assist in the training of local forest and PA staff in resource management, data management, reporting, surveillance and disaster management, to design and implement ecosystem and biodiversity inventory for MTPNP (85,000). Develop targeted conservation programs for significant and threatened species in PAs, assist in developing buffer zones and community resource atlases (150,000, approximately 250 days over 4 years). Support local effort to remove and control invasive species (25 days over three months. 15,500). Work with relevant agencies to develop 15 site specific management plans with standards and criteria for management (80,000). Work with relevant agencies to develop business plans and sustainable financing mechanisms (37,500). For 90 days over 12 months, support local consultants and management team with business planning and implementation (45,000).Work with relevant agencies to develop national PA system plan and 10 year financial strategy to support development of concessions, 60 days over six months (33,000)
2	National/local consultants will support the work of international consultants and technical experts in the field for the duration of the project. The local consultants will work at different sites and on different activities and for different periods (40,000 at 10,000 per year for 4 years). Local consultants will prepare and disseminate information on biodiversity management (40 days, 30,000). Other locals will be involved in the development of the community resource atlases, 75 days over 20 months (56,000). Public outreach and education regarding the project and PA in general (34,000). Support to the international consultants developing the business plans (45,000). Local consultants will lead the process of developing the co-management system 100 days over 2 years (70,000). Consultant to

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

	develop legal framework to govern Trust fund, 30 days over months (28,000). Local consultant will development and operationalize a Protected Areas Information System working for 75 days over one year (53,142).
3	For the drafting of legislation and regulation, advice on land tenure issues, interpretation of the law relating to PA and PA governance, manage registration issues, the legal consultant will work for 75-80 days over two years (70,000)
4	Acquisition of one 4x4 vehicle suited for the rugged terrain in Dominica's PA including insurance and maintenance for 4 years (45,000). Establishing an office to house the PA unit including computers, printers, paper, toner, and general office supplies for 4 years (31,000). Government of Dominica will provide the office space and cover overheads as part of its contribution to the project.
5	Audiovisual equipment will be needed to support the public education program, the networking efforts and the general training of stakeholders (18,500)
6	Regional and international consultants to support work in the buffer zone under component 2: Capacity building and training in landscape design around MTPNP (20,000). Provide guidance in the development of the CRMP 70 days over five months (38,000). Provide guidance in identifying marking and developing buffer zones 65 days over 2 months (35,000). Provide training (capacity development) in park management, visitor control, resource conservation (10,000)
7	Work with PA unit to develop public education outreach approximately 90 days over six months (37,626). Support the development of four community resource management plan, approximately 65 days over four months (30,000); develop and disseminate training manuals for farmers and community stakeholders approximately 45 days for (20,000). Capacity building for PA and buffer zone, two consultants for a total of 50 days (17,875), supporting biodiversity data collection and analysis, approximately 12 days (3,750).
8	Equipment and start up supplies to support agriculture in 4 communities around the buffer zone (farm implements) (157,000).
9	Training in good agriculture practice, composting, flower cutting and preserving, and integrated pest management for women's groups and organic farmers (20,413)
10	Contractual services to undertake logistics for inception workshop, rental of conference room and equipment and provision of coffee breaks for two days (4,000)
11	Conduct 3 independent project audits approximately 6,000 each (18,000)
12	International consultants for mid-term evaluation (after year 2) (12,000) and a terminal evaluation at the end of the project (15,000)
13	Full time Project Coordinator for 4 years (100,000)
14	Estimated UNDP Direct Project Service/Cost recovery charges to UNDP for executing services. In accordance with GEF Council requirements, the costs of these services will be part of the executing entity's Project Management Cost allocation identified in the project budget. DPC costs would be charged at the end of each year based on the UNDP Universal Price List (UPL) or the actual corresponding service cost. An estimated amount of $52,000 is provided in this project.

SECTION IV: Additional Information

PART I: Stakeholder Involvement Plan

PROJECT DEVELOPMENT, THE PPG PROCESS

248. Project design and development followed the UNDP and GEF guidelines and met their requirements. The process was participatory involving all stakeholder (see stakeholder Analysis in Section I, Part I) expected to be involved in the project implementation. The initial stakeholder list was provided by the ECU consisting of public and private sector agencies and organizations, NGOs, CSO and individuals involved in environment and development, supported previous GEF initiatives and those living around PAs and obtaining their livelihood from the resources of the PAs. During the IW thematic consultations were conducted; the meeting participants were divided into thematic groups in order to obtain sector specific data, priorities and expectations. The workshop also allowed the consultants to gather data for the METT scorecard. A field trip was organized to obtain first hand insight into the operations and challenges at Trafalgar falls (a premium tourism site) in the MTPNP, the Botanical Gardens and the Indian River as representative of Dominica's PA. Later, a national validation workshop was convened to present the project activities, proposed institutional framework and financial plan to the stakeholders for validation as per accuracy and authenticity and to get stakeholder input into the design of the project.

STAKEHOLDER INVOLVEMENT PLAN

249. A central element to the successful implementation of this project is the participation of a wide variety of formal and informal partners. The roles of the most important of these partners are described in the Stakeholder Analysis (Section I, Part I of this project document). The project's design incorporates activities and mechanisms to ensure continuous and effective participation by these and other partners in the implementation of the project. The activities and mechanisms include:

- *Project Inception Workshop*: This is a multi-stakeholder workshop that signals the start of project implementation. This workshop will provide opportunity to finalize selection of the Project Steering Committee, review the project work plan and budget; and establish links between the project team, implementing partners and key stakeholders.
- *Project Steering Committee*: A Project Steering Committee will be established to ensure representation of key interests during project implementation. This body will provide technical oversight to the project (see Management Arrangements for details).
- *Capacity Building:* Capacity building at all levels (systemic, institutional and individual) will be undertaken by this project to strengthen implementation and ensure sustainability. Capacity building will ensure skills and competences are deposited in all sectors and groups to enable replication of project outcomes from MTPNP to other PAs in Dominica.
- *Communication Strategy:* The project will develop a communication strategy to facilitate information dissemination; lessons learnt and best practices to all stakeholder groups and the general public. The communication strategy will ensure that all stakeholders are kept up to date on project progress and achievements.

- *Public Outreach and Education:* It is important that communities around PAs be aware of and involved in on-going efforts to create living landscapes, conserve biodiversity, reduce land degradation and protect the natural resources that constitute ecosystems - parks, forests and rivers. This project will establish a public outreach and education program that will deliver project specific information to stakeholders, community organizations and the general public enabling them to make sustainable livelihood decisions, assist in project implementation and monitoring and the development of sustainable eco-tourism products and infrastructure. The outreach and education program will equip PA workers and other stakeholders to reproduce project activity in other areas and in other project.

COORDINATION WITH OTHER RELATED INITIATIVES

250. Implementation of the proposed project will be carried out in coordination with other national and regional projects targeting biodiversity conservation in a protected area framework. The ranges of landscapes to be covered by these projects include everything from ridge to reef. Such diversity of ecosystems and landscapes require diversity of competences and an integrated approach in order to achieve management effectiveness. This project will add significant value by developing mechanisms and models for integrating activities in order to achieve project objectives.

251. This project will run in parallel with the Eastern Caribbean Marine Managed Areas Network (ECMMAN). This four-year project (2013-2017) will invest over EC$14.7 million, to improve fisheries and conserve and restore marine resources, while providing for sustainable job opportunities in coastal communities. Dominica will receive €750,000 (equivalent to EC$2.179 million) of direct investment to establish new and strengthen existing marine management areas; support fisher organizations and provide support for new livelihood opportunities; improve access to data and information regarding management of marine resources. Funding under this project for the OECS also supports the development of sustainable funding mechanisms to support marine management as part of the Caribbean Challenge Initiative. At present Dominica is not involved in the evolving CBF but this project will create the framework that will enable Dominica to become involved and benefit from the US$43 million of new financial commitments from the GEF (4 GEF grants totalling $20m), the German government ($13m), TNC ($8m), USAID ($1m) and the Italian government ($1m). US$15M from the secured funding will be used to capitalize the CBF.

252. Dominica is also implementing the Caribbean Aqua-Terrestrial Solutions (CATS) project that seeks to build capacity of stakeholders to participate in the protection of the marine environment. CATS is an umbrella program that follows a 'ridge-to-reef' approach by bringing together two topical projects, namely one on "Adaptation of Rural Economies and Natural Resources to Climate Change", and the "Management of Coastal Resources and Conservation of Marine Biodiversity". CATS will aid the region to effectively coordinate the support provided by various international development partners (IDP) and NGOs. CATS is a regional development cooperation program between the Caribbean Community and Common Market (CARICOM) and the Government of the Federal Republic of Germany. The implementing agencies are the Environmental Health and Management Unit of the Caribbean Public Health Agency (CARPHA) and the German Government's Agency for International Cooperation (GIZ). In addition to the regional capacity building component of the CATS, Dominica will benefit from the direct investment of US$450,000 for the development of coastal and marine management plans and strengthening of stakeholder participation. These activities are reflections of the work proposed under this project, therefore networking and sharing of best practices and technical expertise will yield exponential benefits to this project.

253. This project will find support from the evolving National Land Use Plan, a capital project designed to rationalize land use and give definition to PAs and significant ecosystems. Also the BAM project which aims to increase productivity in the agriculture sector through the promotion of entrepreneurial development, enhancement of the agricultural information system through policy and framework guidance and training will be an excellent counterpart for the livelihood component of this project. The BAM falls under the special framework of assistance for traditional ACP suppliers of bananas. Under this framework Dominica was allotted €15.5 million in 2012 to assist economic diversification.

PART II: Terms of Reference

254. As noted under the Management Arrangements, day-to-day management and coordination of the project will be under the supervision of the PC. The PC will be supported by a full-time Technical Project Assistant. Indicative TOR for the PC and Technical Assistant are provided below; final TORs for the Project Coordinator and Technical Assistant, and a TOR for the Administrative Assistant, will be created during the project inception phase.

CHIEF TECHNICAL ADVISOR

255. Summary Information

- **Post title**: Chief Technical Advisor
- Organisation:
- Duration of Employment: Based at the PACU and Forestry Division (when in Dominica)
- 10 weeks per year over the 4 years of the project

256. **Overview**: The Chief Technical Advisor (CTA) will be internationally recruited, based on an open competitive process. The CTA will report to the PC. The CTA will provide 10 weeks per year of support to the project; the amount of time spent working in Dominica and the amount working from home will be determined during the project inception phase.

257. **Duties & Responsibilities**: The CTA will be based at the offices of the Forestry Division so as to bring direct technical assistance to the project, as MoAF will be the agency implementing the project. He/She will render technical support to the PC, PA agency staff and other government counterparts. The CTA will coordinate the provision of the required technical inputs; review and preparation of TOR, and provision of technical support to assure the outputs of consultants and other sub-contractors meet expected standards. The main duty of the CTA will be to provide technical guidance to the PC and the MoAF on the overall implementation of project activities, as well as capacity building for the staff of the MoAF and other relevant institutions and partners on PA management, with specific reference to the following:

- Provide technical and strategic assistance to the PC and other counterparts in areas of project planning, management and implementation, of the technical assistance components of the project, including development of biennial work plans, monitoring progress, providing quality assurance for outputs, and ensuring that annual, mid-term and end-of-project targets will be

met;

- Capacity building in the development and implementation of PA management plans and other protected area planning processes and tools, as well as, PA regulations and enforcement mechanisms;
- Provide capacity building support to DFWNP staff and PA managers and support capacity building in PA management functions, including enforcement; research and monitoring; and community empowerment, outreach and dispute resolution;
- Support the PC in coordinating the work of all consultants and sub- contractors, ensuring timely and quality delivery of expected outputs, effective synergy among the various sub-contracted activities, and integration of project outputs into Government work;
- Assist and advise Division of Forestry in key strategic and policy issues related to biodiversity, protected areas, institutional strengthening processes, and appropriate monitoring and evaluation systems and knowledge management systems;
- Provide technical support for management of site activities, monitoring, and impact assessment, as well as technical support in the areas of biodiversity conservation strategic planning, protected area planning and collaborative management; including strategic and business plan for PAS and training in financial management; and 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.

258. Qualifications and Experience

259. Education: Minimum of a Masters' degree in a discipline related to environmental management

260. Experience: Provide technical support for management of site activities, monitoring, and impact assessment, as well as technical support in the areas of biodiversity conservation strategic planning, PA planning and collaborative management:

- Minimum of 15 years of experience in environmental management, with at least 10 years professional experience related to protected areas.
- Experience and knowledge of both terrestrial and marine conservation and PAs preferred
- Practical experience in similar assignments, preferably with experience in in SIDS
- Demonstrated leadership ability and technical ability to communicate complex ideas verbally and in writing.
- Prior UNDP-GEF project experience and knowledge of UNDP and GEF procedures and guidelines is an advantage.

261. Language Requirements: Excellent English, both written and oral

PROJECT COORDINATOR

262. Summary Information

- **Post title**: Protected Area Unit Coordinator and Project Coordinator
- Organisation:

- Duration of Employment: 4 years; full-time basis

263. Overview

264. The Protected Area Unit and Project Coordinator (PC) will be locally recruited jointly by the Government of Dominica (ECU) and UNDP-CO based on an open competitive process. The Project Coordinator's prime responsibility will be to ensure that the project delivers the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. As such, the PC will be responsible for the overall management of the project, including the mobilization of all project inputs; and supervision over project staff, consultants and sub-contractors. The PC will liaise with the Government, UNDP and other implementing partners and donors. The PC will report to the Project Steering Committee on overall progress of project activities.

265. The PC will be supported by a Technical Project Assistant and by a Chief Technical Assistant. Other technical experts (individual consultants or companies) specified in the project document will be hired as needed and will also provide support to the PC. These experts will be procured in accordance with applicable UNDP-GEF and national government guidelines.

266. Duties & Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilize all project inputs in accordance with procedures for nationally implemented projects;
- Lead the preparation of TORs and coordinate the recruitment and selection of project personnel, national and international sub-contractors/consultants and ensure contractors' deliverables;
- Approve cost estimation, time scheduling, project activities and budget, and supervise and coordinate the work of all consultants and sub-contractors;
- In consultation with implementing partners, prepare and revise project work-plan and financial plans
- Coordinate and oversee implementation of the project's monitoring and evaluation plan;
- Facilitate administrative backstopping to subcontractors and training activities supported by the Project;
- Liaise with relevant government agencies, private partners, and all other partners for effective coordination of all project activities;
- Oversee and ensure timely submission of the Inception Report, Combined Project
- Implementation Review/Annual Project Report (PIR/APR), 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 stakeholders;

267. Report progress of project to the PSC, and ensure the fulfilment of Project Steering Committee directives.

268. Oversee the integration and follow-up of studies, research and project technical activities;

269. Oversee the exchange and sharing of experiences and lessons learned with relevant projects nationally and internationally;

270. Oversee implementation of the stakeholder participation plan and assist community groups, municipalities, NGOs, staff, students and others with development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;

271. Ensure the timely and effective implementation of all components of the project;

272. Assist relevant government agencies and implementing partners with development of essential skills through training workshops and on the job training, thereby building institutional capacity;

273. Qualifications and Experience

274. Education:

- A post-graduate university degree in Environmental Management or closely related field
- At least 10 years of experience in natural resource planning and management (preferably in the context of protected area planning and management);
- At least 5 years of project management experience;
- Working experience with the project stakeholder institutions and agencies is desired;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Knowledge of and experience with operational modalities and procedures of UNDP-GEF and the government of Dominica;
- Strong knowledge about the political and socio-economic context related to the protected area system, biodiversity conservation and wetlands management at national, provincial and municipal levels;
- Ability to effectively coordinate a multi-stakeholder project;
- Good communication skills (writing, speaking, and reporting skills);
- Good Information Technology skills; and

275. Language Requirements: Proficiency in English, both written and oral; knowledge of creole would be an advantage.

TECHNICAL ASSISTANT

276. Summary Information

- **Post title**: Technical Project Assistant
- Organisation:
- Duration of Employment: Four years; full-time basis

277. Overview

278. The Technical Project Assistant (TA) will be locally recruited, based on an open competitive process. The Technical Assistant will report to the Project Coordinator and will perform such duties assigned by the PC in keeping with the specific TOR.

279. Under the guidance and direct supervision of the PC and UNDP Programme Officer, the TA provides support to the effective and efficient management of the Project through a range of actions contributing to the design, planning, management and monitoring of project activities. The TA applies and promotes the principles of results-based management (RBM), as well as a client-oriented approach consistent with UNDP rules and regulations.

280. The TA works in close collaboration with the PC and other project stakeholders for effective achievement of results, anticipating and contributing to resolving complex programme/project-related issues and information delivery.

281. Duties & Responsibilities

282. The TA will be based at the offices of the Department of Forestry and Wildlife so as to bring direct technical assistance to the project, as the Forestry and Wildlife Department will be principal government agency involved in the implementation of the project. The main duty of the TA will be to provide technical assistance to the PCU and Project partners. Specifically the TA will:

Administrative management

- Provide support to international advisors in the implementation of their tasks for the achievement of project results (communication, contracts, agenda, hotel reservations, etc);
- Maintain records on all project personnel and local consultants and their respective status (contracts, TORs, sick leave, vacation, etc.) in accordance with accepted policies and procedures;
- Prepare and issue contracts;
- Make pertinent logistical arrangements for the prompt and effective implementation of the programme activities;
- Draft minutes of Steering Committee meetings;
- Assume overall responsibility for administrative matters of a more general nature, such as registry and maintenance of project files and records
- Arrange external and internal meetings (including the meetings of the Steering Committee, and Technical Working Groups, among others).

Financial management

- Prepare requests for advance of funds and/or direct payments;
- Monitor budget expenditures and maintain a proper record of approved project budgets and their revisions;
- Prepare proposals for budget revisions;
- Prepare and submit expenditure and programme budget status reports;
- Respond to queries from the Government and UNDP with respect to financial aspects of the programme, liaise with UNDP-appointed and external auditors wherever required;
- Prepare recurring reports as scheduled and special reports as required for budget preparations and audit;

- Advise and assist international advisors and national consultants on all aspects of allowances, travel claims and other financial matters and calculate payments due for claims and services;
- Undertake other financial and administrative tasks on an *ad hoc* basis.

Procurement

- In accordance with the work plan, arrange for procurement of equipment, supplies and services;
- Arrange for equipment maintenance and insurance as required;
- Ensure that contractual processes follow the stipulated UNDP procedures;
- Physically clear and ensure delivery of equipment and supplies procured for the various programme sites;
- Maintain an equipment and spare inventory including verification and transfer when required.

283. Qualifications and Experience

284. Education: University Degree in economics, finance, accounting, law, public administration or other related field.

285. Experience:

- At least two years of experience is administrative work, accounting, finance, economics, public administration or other substantive area is required.
- Experience in the usage of computers and office software packages (MS Word, Excel, etc) and advance knowledge of spreadsheet and database packages, experience in handling of web based management systems.
- Demonstrated leadership ability and technical ability to communicate complex ideas verbally and in writing.
- Prior UNDP-GEF project experience and knowledge of UNDP and GEF procedures and guidelines is an advantage.

286. Language Requirement: A good command of English, both written and oral

TECHNICAL FORESTRY OFFICER

287. Summary Information

- **Post title**: Technical Forestry Officer
- Organisation: Forestry Division
- Duration of Employment: Four years; full-time basis

288. Overview

289. The Technical Forestry Officer (TFO) will be locally recruited, based on an open competitive process. The TFO will report to the Director of Forestry and will perform such duties as may be assigned to him by the project coordinator in keeping with his specific TOR.

290. Duties & Responsibilities

291. The TFO will be based at the offices of the DFWNP so as to bring direct technical assistance to the project, as the DFWNP will be principal government agency involved in the implementation of the project until the PACU is established and functional. The main duty of the TFO will be to provide technical support to the Project partners and liaise with the PACU on the overall implementation of project activities, as well as provide technical assistance to and support the capacity building component in both the PAs and the buffer zone, including specifically for livelihood activities in the buffer zone. Specifically the TFO will

- Provide overall support to the project coordinator and CTA in the planning and implementation of all components of the project, including advising in the preparation of work plans and technical reports;
- Support capacity building in the development and implementation of PA management plans and other protected area planning processes and tools, as well as PA regulations and enforcement mechanisms;
- Support capacity building in PA management functions, including enforcement; research and monitoring; and
- Support the planning and preparation of ecological inventories and conservation programs within PA sites.

292. Qualifications and Experience

- Education: To match TFO requirements by Government
- Experience: To match TFO requirements by Governments
- Language Requirement: A good command of English, both written and oral

OVERVIEW OF INPUTS FROM TECHNICAL ASSISTANCE CONSULTANTS FINANCED WITH GEF FUNDS

Table 8: Technical assistance consultants

Natl. / Intl.	Purpose	Intensity of input	Indicative budget (US$)*	Key Tasks and Responsibilities
I	Chief Technical Advisor for Protected Areas	Approximately 250 days over the 4 years of the project	150,000	Capacity building in writing PA management plans and other planning processes and tools; developing and implementing PA regulations; guidance in writing PAS strategic and business plan and training in financial management (see TOR for more details). Develop standard operating procedures for PA management, as well as criteria and procedures for identification, assessment, and designation of new terrestrial and marine protected areas. Develop roadmap for establishment of CTF and DNS.
I	Ecological / Biodiversity Inventories for Terrestrial PAs	Approximately 120 days over 2 years	85,000	Work with the DFWNP and local consultants to design and implement the ecological / biodiversity inventories at MTPNP.

Natl. / Intl.	Purpose	Intensity of input	Indicative budget (US$)*	Key Tasks and Responsibilities
I	Conservation Programs at Terrestrial PAs	Approximately 300 days of work over 12-18 months (2-3 consultants)	150,000	Develop targeted conservation /monitoring programs for significant and threatened species or habitats.
N	Drafting of legislation and regulations	75 days over 2 years	70,000	Drafting legislation and regulations on land tenure issues, interpreting law relating to PA governance, manage registration issues.
I	Plan for invasive species treatments & removal	Working 25 days over two (2) months.	15,500	Develop plan for invasive species treatments & removal
N	Develop National PA system plan and 10 year finance strategy	Approximately 60 days of work over 8 months	33,000	Work with the relevant agencies to write the financial strategy to support development of concessions.
N	Development of co-management system	100 days over 2 years	70,000	Work with the relevant agencies and stakeholders to develop a co-management system and 10-year financial strategy & support development of concession development and management strategy
I	Develop PA Units site specific Management Plans	Approximately 120 days of work over 15 months	80,000	Work with relevant agencies and stakeholders to develop 15 management plans (PAs and nature sites), standards and criteria for management, and support development of harmonized fee structure
I	Design Sustainable Financing Mechanisms for PA system	Approximately 60 days of work over 8 - 12 months	37,500	Work with the relevant agencies to develop and implement business plans and sustainable financing mechanisms for the individual units, develop harmonized fee structure and develop a concession development and management strategy.
N	PA Unit business and Management Plans	Approximately 120 days of work over 15 months	45,000	Support for international consultants on management and business plans.
I	Strengthen Fee Collection system	Approximately 15 days of work over 2 months	10,000	Review and recommend most appropriate fee collection system to be implemented across all PAs.
I	Development and operationalize a Protected Areas Information System	Approximately 60 days of work over 6 months	53,142	Develop and implement PA information system.
I	Buffer Zone criteria and identification	Approximately 45 days of work over 6 months	35,000	Identify criteria for buffer zones and define the boundaries of the MTPNP Buffer Zone and develop land use guidelines for buffer zones

Natl. / Intl.	Purpose	Intensity of input	Indicative budget (US$)*	Key Tasks and Responsibilities
I	Develop 4 Community Resource atlases	Approximately 75 days over 20 months	56,000	Develop 4 Community Resource Management Plans
N	Develop 4 Community Resource Management Plans	2 consultant, 60 working days over 6 months	38,000	Supporting the international consultant for the develop of the 4 Community Resource Management Plans
I	Capacity building of PA managers for terrestrial PAs	Two consultants for a total of 50 days over six weeks	17,875	Capacity building (training) for PA managers and co-managers
N	Public education and awareness	Approximately 100 days over 15 months	37,626	Work with the PACU and other agencies to develop and implement public education and awareness programs regarding the PAS and newly established PA units
N	Develop and disseminate four community resource management plans	65 days over six months	35,000	Support the development of four community resource management plans working with the community groups in the area
N	Develop and disseminate training manuals	45 days over 3 months	20,000	Develop and disseminate a manual of biodiversity friendly agricultural and land management practices (+ printing).
N	Support biodiversity data management	12 days	3,750	Support biodiversity data collection and analysis in keeping with the NBSA requirements.
N	Capacity building in buffer zone	21 trainings, 1 day each	20,000	8 x Training for community capacity building in surveillance and reporting (2 per community) 6 x Training for organic agriculture practices and alternative agricultural management techniques 2 x Training for organizational management. 4 x Training for production of organic fertilizers "Liquid Tea" 1 x Training of extension officers within key government Departments in the area of community vulnerability mapping and climate change adaptation planning 2 x Training for community members to create community resource management plans.
N	Capacity building of staff at MTPNP	Approximately 30 days over three months	10,000	Help design and implement capacity building in terrestrial Guide training of PA staff in trail design/management; enforcement; management planning; ecology; first aid;

Natl. / Intl.	Purpose	Intensity of input	Indicative budget (US$)*	Key Tasks and Responsibilities
				community empowerment, outreach and dispute resolution
I	Development of framework to govern trust fund.	Approximately 30 days over three months	28,000	Develop the framework to promote the establishment of a national trust fund to link into regional and global BD trust funds
N	Local support	Approximately 200 days over 4 years	40,000	Local consultants will support international consultants on various activities and at different sites as needed over the life of the project
N	Development of business plans	100 days over two years	45,000	Local consultant will support the development and dissemination of business plans for the various PAs and the training of locals in the understanding and use of the business plans.
I	External Mid-Term Evaluation of Project	Approximately 20 days of work over 2 months (1-2 consultants)	12,000	Produce formal Mid-Term Evaluation according to UNDP and GEF templates and requirements
I	External Terminal Evaluation of Project	Approximately 20 days of work over 2 months (1-2 consultants)	15,000	Produce formal Terminal Evaluation according to UNDP and GEF templates and requirements

PROJECT STEERING COMMITTEE

1.0 BACKGROUND

This project seeks to improve the sustainability of PAs in Dominica using the Morne Trois Piton National Park (MTPNP) as a model for replication across other PAs in Dominica. The project addresses both local and systemic challenges specific to MTPNP and generally to all PAs in the Commonwealth of Dominica. The project will establish a buffer zone around Dominica's World heritage Site MTPNP and develop a management plan for the MTPNP inclusive of the buffer zone. Site specific management plans will be developed for all PAs in Dominica with supporting staff. The management and operations of these PAs will be harmonized and coordinated giving rise to a National PA management system. This PA management system will improve management effectiveness by sharing responsibility among PA staff, increase revenue generation and collection through rationalization of site fees and adherence to the PA business plan.

The project will reduce threats to biodiversity caused by encroachment, habitat destruction and change of land use (from forest to agriculture, housing, roads) through a livelihood initiative that seeks to create productive landscapes. Control measures will be implemented in the buffer zone to regulate land use further supporting biodiversity conservation while increasing stewardship and revenue generation and building the adaptive capacity of the communities to the impacts of climate change. The conservation effort by the communities adjacent to the PA will reduce land degradation, coastal sedimentation and ultimately improve the health of the coral reefs that protect the coastal communities.

The demarcation and legal establishment of the buffer zone around MTPNP will significantly improve the management of the park and set the stage for the protection of all other PAs in Dominica. It will improve management of PAs by including civil society participation in PA management and create productive landscapes and seascapes that will enhance economic growth development in Dominica.

2.0 COMPOSITION

Representatives from the following organisations shall comprise the Project Steering Committee:

- Environmental Coordinating Unit (Chair)
- Ministry of Agriculture and Fisheries
- Ministry of Finance
- Ministry of Tourism
- Physical Planning Division
- Soufriere Scots-Head Marine Reserve Local Area Management Authority (SSMR LAMA)
- Dominica National Council of Women
- UNDP Barbados and the OECS

3.0 FUNCTIONS OF THE PROJECT STEERING COMMITTEE

1. Offer overall policy and technical guidance and direction towards the implementation of the project, ensuring it remains within any specified constraints
    a. Provide input into work plans, budgets and implementation schedules to guide the achievement of project objectives
    b. Approve project implementation schedule, annual work plan (AWP) and indicative project budget at the commencement of each project year within its remit
    c. Provide guidance and agree on possible countermeasures/management actions to address specific project risks
    d. Address project issues as raised by the National Project Coordinator
    e. Discuss progress and identify solutions to problems facing any of the project´s partners
2. Agree on National Project Coordinator's tolerances as required, and provide ad hoc direction and advice for situations when tolerances are exceeded
    a. During the life of the project, review proposals for major budget re-allocation such as major savings or cost increases, or for use of funds for significantly different activities
    b. Review and endorse changes in project work plans, budgets and schedules as necessary
3. Monitor compliance with the project's objectives
    a. Monitor both the budget and the prompt delivery of financial, human and technical inputs to comply with the work plan
    b. Monitor project implementation and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans
    c. Review and make decisions on recommendations related to project management from the Executing Agency or Implementing Agency
    d. Arbitrate where necessary and decide on any alterations to the programme

4. Endorse an overall project evaluation and monitoring function for the duration of the project through a mechanism agreeable to all Project Board parties
5. Providing necessary oversight to ensure sustainability of project
    a. Ensure the participation and ownership of stakeholders in achieving the objectives of the project
    b. Ensure communication of the project and its objectives to stakeholders and the public
    c. Approve the project communication strategy and public information plans prepared by the PSC
6. Facilitate linkages with high-level decision making
7. Convene ordinary meetings to consider the Technical Committee's proposals and recommendations, as well as the progress made by the project
8. Convene, if necessary, extraordinary meetings

4.0 MEETINGS

The Project Steering Committee will meet at least every six months, at a time and place convenient to all members. A quorum will be constituted by 51% of the representatives listed at 2.0, and this must be present for meetings of the Project Steering Committee to be convened.

5.0 CHAIRPERSON

The Chair will chair the Project Steering Committee meeting. The Chair will be responsible for:

1. The conduct of the meeting
2. Ensuring that an accurate record of the discussions and decisions of each meeting is prepared and forwarded to all members
3. Ensuring adequate follow-up on the undertakings of the members of the Project Steering Committee.

6.0 SECRETARIAT OF THE COMMITTEE

The National Project Coordinator will provide secretariat services to the Project Steering Committee.

7.0 COMMUNICATION

Documentation being presented for review at any meeting of the Project Board will, as far as possible, be distributed two weeks prior to the meeting. The preparation of the records of all official meetings of the Project Steering Committee will be the responsibility of the secretary. These records must be forwarded to Project Board members no later than two weeks after its conclusion.

8.0 DURATION

The Project Steering Committee will exist for the duration of the project.

9.0 FUNDING OF PROJECT STEERING COMMITTEE ACTIVITIES

Project resources will be used to support the participation of representatives and other members as required.

10.0 MEETING LOCATION

Meetings of the Project Steering Committee will be held at locations agreeable to all members.

Project Annexes

ANNEX 1: Financial Sustainability Scorecard

293. The Financial Sustainability Scorecard was completed for the first time in this baseline analysis. The financial data for Part I (which concerns the overall financial status of the protected area system, including its costs, revenues and financing gaps) of the scorecard, though incomplete due to data gaps, was collected and systematized as much as possible. The results reflected in this document underwent significant stakeholder scrutiny with data collection and validation being a highly participatory process with all significant stakeholder groups (state and non-state being very well represented in the process). The scores are consolidated in the tables below.

Table 9: Summary of Financial Sustainability Scorecard

Components	Actual Score for PA System	Total Possible Score	Actual Score as % of TPS
COMPONENT 1: Governance frameworks that enable sustainable PA financing	**7**	**111**	**6**
Element 1 – Legal, policy and regulatory support for revenue generation by Pas	3	6	50
Element 2 - Legal, policy and regulatory support for revenue sharing within the PA system	0	9	0
Element 3 - Legal and regulatory conditions for establishing endowment or trust funds	0	9	0
Element 4 - Legal, policy and regulatory support for alternative institutional arrangements for PA management	1	12	8
Element 5 - National PA financing strategies	0	30	0
Element 6 - Economic valuation of protected area systems	0	6	0
Element 7 - Improved government budgeting for PA systems	0	12	0
Element 8 - Clearly defined institutional responsibilities for PA management and financing	1	3	33
Element 9 - Well-defined staffing requirements, profiles and incentives at site and system level	2	24	8
COMPONENT 2: Business planning and other tools for cost-effective management	**3**	**85**	**3**
Element 1 - Site-level business planning	0	30	0
Element 2 - Operational, transparent and useful accounting and auditing systems	1	9	11
Element 3 - Systems for monitoring and reporting on financial management performance	2	12	16
Element 4 - Methods for allocating funds across individual PA sites	0	4	0
Element 5 - Training and support networks to enable park managers to operate more cost-effectively	0	30	0

Components	Actual Score for PA System	Total Possible Score	Actual Score as % of TPS
COMPONENT 3: Tools and systems for revenue generation and mobilization	**15**	**71**	**21**
Element 1 - Number and variety of revenue sources used across the PA system	4	12	33
Element 2 - Setting and establishment of user fees across the PA system	5	15	33
Element 3 - Effective fee collection systems	5	11	45
Element 4 - Marketing and communication strategies for revenue generation mechanisms	0	6	0
Element 5 - Operational PES schemes for Pas	0	12	0
Element 6 - Operational concessions within Pas	1	12	8
Element 7 - PA training programmes on revenue generation mechanisms	0	3	0
Total	**25**	**267**	**9%**

ANNEX 2: Capacity Development Scorecard

Table 10: Summary of Capacity Development Assessment for Protected Areas Scorecard

Strategic Areas of Support	Systemic			Institutional			Individual			Average %
	Project Scores	Total possible score	%	Project Scores	Total possible score	%	Project Scores	Total possible score	%	
(1) Capacity to conceptualize and develop sectoral and cross-sectoral policy and regulatory frameworks	4	6	67	3	3	100	NA	NA	NA	78%
(2) Capacity to formulate, operationalize and implement sectoral and cross-sectoral programmes and projects	7	9	78	18	27	67	5	12	42	63%

Strategic Areas of Support	Systemic			Institutional			Individual			Average %
	Project Scores	Total possible score	%	Project Scores	Total possible score	%	Project Scores	Total possible score	%	
(3) Capacity to mobilize and manage partnerships, including with the civil society and the private sector	4	6	67	6	6	100	2	3	67	80%
(4) Technical skills related specifically to the requirements of the SPs and associated Conventions	2	3	67	2	3	67	3	3	100	78%
(5) Capacity to monitor, evaluate and report at the sector and project levels	2	6	33	4	6	67	2	3	67	53%
TOTAL Score and average for %'s	**19**	**30**	**63%**	**33**	**45**	**73%**	**12**	**21**	**57%**	**67%**

ANNEX 3: Risk Analysis

Table 11: Risks analysis

RISK LOG		**FORM [029]** **Ref:** **Version:**
Programme:	**Project:**	**PRINCE2**
RISK IDENTIFIER: **[0001]**	Description: There have been attempts to amend the Protected Areas Act in a manner that threatens the sustainability and integrity of PAs in Dominica.	Risk Category: Political

Probability: Moderately Likely	Impact: If approval is given for the requested amendment, it will open the door to other amendments that reduce the size of the PA or redefine its use; ultimately converting PA to other land use type.	Proximity: Attempts were made during February 2015
Countermeasures: PPG team met with Senior Government officials to apprise them of the consequences of such actions and provided alternative actions.		

ANNEX 4: Special Clauses

294. In case of government cost-sharing through the project which is not within the CPAP, the following 10 clauses should be included:

295. The schedule of payments and UNDP bank account details.

296. The value of the payment, if made in a currency other than United States dollars, shall be determined by applying the United Nations operational rate of exchange in effect on the date of payment. Should there be a change in the United Nations operational rate of exchange prior to the full utilization by the UNDP of the payment, the value of the balance of funds still held at that time will be adjusted accordingly. If, in such a case, a loss in the value of the balance of funds is recorded, UNDP shall inform the Government with a view to determining whether any further financing could be provided by the Government. Should such further financing not be available, the assistance to be provided to the project may be reduced, suspended or terminated by UNDP.

297. The above schedule of payments takes into account the requirement that the payments shall be made in advance of the implementation of planned activities. It may be amended to be consistent with the progress of project delivery.

298. UNDP shall receive and administer the payment in accordance with the regulations, rules and directives of UNDP.

299. All financial accounts and statements shall be expressed in United States dollars.

300. If unforeseen increases in expenditures or commitments are expected or realized (whether owing to inflationary factors, fluctuation in exchange rates or unforeseen contingencies), UNDP shall submit to the government on a timely basis a supplementary estimate showing the further financing that will be necessary. The Government shall use its best endeavours to obtain the additional funds required.

301. If the payments referred above are not received in accordance with the payment schedule, or if the additional financing required in accordance with paragraph ( ) above is not forthcoming from the Government or other sources, the assistance to be provided to the project under this Agreement may be reduced, suspended or terminated by UNDP.

302. Any interest income attributable to the contribution shall be credited to UNDP Account and shall be utilized in accordance with established UNDP procedures.

303. In accordance with the decisions and directives of UNDP's Executive Board:

The contribution shall be charged:

(a) […%] cost recovery for the provision of general management support (GMS) by UNDP headquarters and country offices

(b) Direct cost for implementation support services (ISS) provided by UNDP and/or an executing entity/implementing partner.

304. Ownership of equipment, supplies and other properties financed from the contribution shall vest in UNDP. Matters relating to the transfer of ownership by UNDP shall be determined in accordance with the relevant policies and procedures of UNDP.

305. The contribution shall be subject exclusively to the internal and external auditing procedures provided for in the financial regulations, rules and directives of UNDP.

Table 12: Project activities and work plan

	2015		2016				2017				2018				2019		
Outputs	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	
Component 1. Strengthening the core zone management of Protected Areas at a systemic level and scale up innovative interventions at core zone of selected PA to improve sustainability																	
Output 1.1: Develop and implement resource management strategies for Morne Trois Pitons National Park (MTPNP), including: guidelines and restrictions on productive activities within PA boundaries; resource management and business plan; and strategy for reducing threats to BD from within and outside the PA																	
Activity 1.1.1 Biodiversity Assessment, Monitoring and Conservation																	
1.1.2 Develop new / update draft, approve and initiate implementation of Management Plan for the MTPNP																	
Output 1.2 Operational and functional capacity established for management of Morne Trois Pitons National Park to ensure that National Parks Unit capacity is increased																	
1.2.1 Provide with sufficient resources (equipment and materials) for effective MTPNP management																	
1.2.2 Operational Capacity for MTPNP																	
1.2.3 Develop and implement a surveillance plan to monitor/prevent illegal activities and fires and enforcement of new guidelines																	

	2015		2016				2017				2018				2019		
Outputs	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	
Output 1.3 Officially establish Protected Area Coordinating Unit to actively develop a PA system implemented across functional managing agencies for improved management effectiveness																	
1.3.1 Establish Protected Areas Coordinating Unit (PACU)																	
1.3.2 Strengthen Protected Areas Policies																	
1.3.3 Develop Protected Area Legislation or update and amend existing protected area legislation and Acts																	
1.3.4 Improve financial stability of Protected Area System																	
1.3.5 Develop a Protected Area System Plan that includes an overall management strategy for the national PA system																	
1.3.6 Develop evidence-based management plans																	
1.3.7. Consolidated protected areas information system supporting PA management objectives																	
1.3.8 Standardize administrative and financial processes in co-management agreements																	
Component 2. Establish and manage buffer zone as a key component of National Protected Area System and select experiences to be scaled up beyond the buffer zone. At the systemic level, the project will strengthen the institutional and legal framework necessary for effective management of Protected Area buffer zones.																	
Output 2.1 Buffer zone for Morne Trois Pitons National Park legally established and demarcated, with inter sectoral committee for the management of integrated PA landscapes (core and buffer zone) established and functioning within legal framework																	

	2015		2016				2017				2018				2019		
Outputs	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	
2.1.1 Establish Inter sectoral Committee for the management of integrated landscapes (core and buffer zone).																	
2.1.2 Identify and define the boundaries of the Buffer Zone																	
2.1.3 Legally establish buffer zone as a managed landscape																	
2.1.4 Demarcate the buffer zone with signposts																	
Output 2.2 Codification of higher minimum standards in environmental impact assessment (EIA) requirements for new developments in the buffer zone																	
2.2.1 Codify stronger development standards into the EIA process																	
2.2.2 Develop a land tenure and compensation review process																	
2.2.3 Carry out outreach programmes in MTPNP buffer zone																	
Output 2.3 Identify physical threats and reduce vulnerabilities in the MTPNP using community based land management activities to improve livelihood viability and associated socioeconomic conditions																	
2.3.1 Develop four (4) Community Resource Management Plans (CRMP).																	
2.3.2 Engage local residents within the buffer zone in livelihood activities																	

	2015		2016				2017				2018				2019		
Outputs	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 1**	**Q 2**	
2.3.3 Strengthen community/organization capacities to effectively manage the buffer zone**.**																	
2.3.4 Community based education programme																	

ANNEX 5: Social and Environmental Screening Template

Project Information

Project Information	
1. Project Title	**Supporting Sustainable Ecosystems by Strengthening the Effectiveness of Dominica's Protected Areas System**
2. Project Number (PIMS)	5089
3. Location (Global/Region/Country)	Country: Commonwealth of Dominica

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
This project is seeking to improve the management of protected areas in Dominica that provides social, economic and environmental benefits to Dominicans and visitors. It supports the rights of humans to access the lands and resources; the buffer zone will be managed as living landscapes, this way the project serves to enhance availability, accessibility and quality of benefits derived from the natural resource. There is a strong stakeholder involvement plan from project inception and development through to implementation and monitoring. Women's organizations and community groups are integral to project implementation; they will benefit from capacity development activities that will enable them to be champions of project development. Emphasis would be placed on the participation and inclusion of marginalized and vulnerable groups (e.g. persons with disabilities, indigenous peoples, the poor) who will be impacted during policy development and design and implementation of interventions within these communities. The consultative mechanisms envision an approach which is equitable and non-discriminatory in giving all stakeholders a voice and contribution to the decision making process, accountability and rule of law. Emphasis will also be placed on ensuring that information will be shared in a way that all stakeholders understand, In addition, the outputs of the project will promote the reduction of vulnerability and building of resilience to climate change which will advance people's rights to clean air, reduced risks to natural disasters, sustainable livelihoods and safety and security. In addition, individual capacities will be strengthened, producing social capital that will benefit community initiatives in other spheres (e.g. health, education)
Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment
The participation of women is highlighted in consultative and decision-making aspects, especially where their vulnerability is very high e.g. poor female-headed households. The Department of Women's Affairs in Dominica will be involved in outreach activities and the training of women's groups in livelihood activities. Special attention would be given to the community groups in the buffer zone around Morne Trois Piton which are predominantly women's groups involved in agriculture, flower production, vending of local craft and hospitality. Efforts will also made to achieve gender parity in the representation on the Steering Committee and procurement of consultants. Women and youth will be particularly targeted as fundamental stakeholders of the project, through their involvement in the design and implementation of capacity building and awareness programmes, to ensure their equitability and sustainability. Special attention will be paid to gender issues in developing socio-economic indicators, and Dominica's National Council of Women will be engaged to help ensure women are targeted and supported through the project's agricultural and other livelihood initiatives. Socio-economic related activities will seek to build on existing information on the actual benefits women and disadvantaged communities can draw from ecosystems, with education and outreach

targeting the opportunities and socio-economic benefits to the buffer zone communities in maintaining ecosystem health and the benefits provided by the ecosystem services generated from the MTPNP.
Briefly describe in the space below how the Project mainstreams environmental sustainability
This project supports the implementation of national environmental sustainability priorities identified in the UNDAF, the Multi-Country Program Action Plan and the obligations of the Rio conventions [Multilateral Environmental Agreements] (MEAs). The project takes cognizance of the country's NBSAP and specifically supports the Ache Targets set by Dominica for the period to 2020. The project's title and objective speak to strengthening environmental sustainability and improving management effectiveness at the institutional and systemic levels. The idea is to apply precautionary approaches to natural resource conservation involving the stakeholders as both beneficiaries and custodians of the resource. In this way the project forges linkages between environmental dimensions, disaster prevention and improving risk resilience.

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?** *Note: Respond to Questions 4 and 5 below before proceeding to Question 6*			**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: Attempts to change or amend the Protected Areas Act (checklist 3.1.2)	I = 3 P = 3	**Moderate**	The amendment sought is to reduce the physical size of the area designated as PA, if done all PAs are then at risk of having size change at will and taking away the protection afforded to biodiversity and the global and local benefits	Consultants held meetings with senior government officials to apprise them of the potential danger. UNDP should dialogue with the government of Dominica on the matter.
Risk 2: There is a risk that rights-holders do not have the capacity to claim their rights.	I = 2 P = 2	**Low**	Except for some areas of the proposed buffer zone, the land under consideration is state land and state controlled so that civil society often overlook or miss changes that will later affect them.	
	QUESTION 4: What is the overall Project risk categorization?			

	Select one (see SESP for guidance)		Comments
	Low Risk	☐	
	Moderate Risk	☒	
	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	☐	
	Principle 2: Gender Equality and Women's Empowerment	☐	
	1. Biodiversity Conservation and Natural Resource Management	☒	
	2. Climate Change Mitigation and Adaptation	☐	
	3. Community Health, Safety and Working Conditions	☐	
	4. Cultural Heritage	☐	
	5. Displacement and Resettlement	☐	
	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.

SESP ATTACHMENT 1. SOCIAL AND ENVIRONMENTAL RISK SCREENING CHECKLIST

Checklist Potential Social and Environmental Risks		
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? [23]	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.	Are there measures or mechanisms in place to respond to local community grievances?	Yes
6.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
7.	Is there a risk that rights-holders do not have the capacity to claim their rights?	Yes
8.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
9.	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?	No
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
3.	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

[23] 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.

1.2	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
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?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
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.*	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant[24] 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?	No
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, and erosion, flooding or extreme climatic conditions?	No

[24] 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.]

3.6	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
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)?	No
5.3	Is there a risk that the Project would lead to forced evictions?[25]	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 rights, lands and territories of indigenous peoples (regardless of whether Indigenous Peoples possess the legal titles to such areas)?	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
6.4	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.5	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
6.6	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.7	Would the Project potentially affect the traditional livelihoods, physical and cultural survival of indigenous peoples?	No
6.8	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No

[25] 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.

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
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