PROJECT DEVELOPMENT FACILITY
REQUEST FOR PIPELINE ENTRY AND PDF B APPROVAL

AGENCY'S PROJECT ID: 3424
COUNTRY: Dominican Republic
PROJECT TITLE: Re-engineering of the Dominican Republic National Protected Areas System
GEF AGENCY: UNDP
OTHER EXECUTING AGENCY: Secretariat for Environment and Natural Resources (SEMARN)
DURATION: PDF B 10 months, Full project 6 years (est.)
GEF FOCAL AREA: Biodiversity
GEF OPERATIONAL PROGRAM: Arid and Semi-Arid Zone Ecosystems (OP1), Coastal, Marine and Freshwater Ecosystems (OP2), Forest Ecosystems (OP3) and Mountain Ecosystems (OP4).
GEF STRATEGIC PRIORITY (IES): BD-1, Catalyzing Sustainability of Protected Areas
ESTIMATED STARTING DATE: February 2006
PIPELINE ENTRY DATE: November 2005

FINANCING PLAN (US$)	
GEF ALLOCATION	
Project *(estimated)*	8,000,000
Project Co-financing *(estimated)*	19,000,000
PDF A (approved August 2005)	25,000
PDF B	346,000
PDF C	
Sub-Total GEF PDF	371,000
PDF CO-FINANCING (details provided in Part II, Section E – Budget)	
UNDP	14,000
National contribution	8,000
Others	215,000
Sub-Total PDF Co-financing:	237,000
Total PDF Project Financing:	608,000

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

(Enter Name, Position, Ministry)

Dr. Max Puig Miller, Secretario de Estado
Secretaría de Estado de Medio Ambiente y Recursos Naturales

Date*: (Month, day, year)*

December 17, 2004

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for pipeline entry and PDF B approval.

IA/ExA Coordinator

Date:

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LIST OF ACRONYMS

CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
EA	Executing Agency
FOGAP	Strengthening of Local Capacities for Environmental Planning and Management (Dominican Republic)
FSP	Full Size Project
GEF	Global Environment Facility
GM	Global Mechanism of the UNCCD
IA	Implementing Agency
INDRHI	National Water Resources Institute
IUCN	World Conservation Union
JICA	Japanese International Cooperation Agency
M&E	Monitoring and Evaluation
NPAS	National Protected Area System
PA	Protected Area
PDF A	Project Development Facility Block A
PDF B	Project Development Facility Block B
PES	Payment for Environmental Services
SGP	Small Grants Programme (of UNDP/GEF)
SAP	Strategic Action Programme
SEA	Secretariat for Agriculture
SEMARN	Secretaría de Medio Ambiente y Recursos Naturales (Secretariat for Environment and Natural Resources)
SLM	Sustainable Land Management
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
WB	World Bank
WSSD	World Summit on Sustainable Development
WWF	World Wide Fund for Nature

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PART I - PROJECT CONCEPT

A – PROJECT SUMMARY

1. The Dominican Republic occupies the approximately eastern two-thirds (48,442 km$^{2)}$ of Hispaniola Island, with the western third of the island being Haiti. The country exhibits diverse bioclimatic zones and topography, ranging from dry (450 mm/year) to humid (>2500 mm/year), in accordance with an altitudinal gradient that varies from 40 meters below sea level to more than 3,000 meters above sea level. This great diversity has given rise to a wide array of ecosystems and habitats. These include arid and semi-arid zones, coastal, marine and freshwater habitats, forest ecosystems, and mountain ecosystems.

2. The country's complex and diverse array of habitats supports a high degree of unique and globally significant biodiversity, and this has led to it being identified as a "Caribbean Hotspot"[1]. 30 endemic birds, including the threatened Ridgeways Hawk (*Buteo ridgwayi*) and the extremely rare La Selle's Thrush (*Turdus swalesi.*) and the Bay Breasted Cuckoo (*Hyetornis rufigularis*.), in addition to 11 other endemics, are considered threatened. The Dominican Republic also hosts an additional 270 migratory bird species that rely on its natural areas as important components of the eastern flyway. Among these are the threatened Kirtland's warbler *(Dendroica kirtlandii),* Bicknell's thrush *(Catharus bicknelli),* and Cape May warbler (*Dendroica tigrina.*). The country's terrestrial biodiversity shares an additional 30% co-endemism rate with the island of Cuba, making the Dominican flora and fauna of critical importance to the Antillean biodiversity profile. Three of the nation's terrestrial ecosystems, the Hispaniola pine forest, the Hispaniola humid forests, and the wetlands of the Enriquillo basin, are listed[2] among the top conservation priorities in the Latin America and the Caribbean Ecoregions. Dominican marine biodiversity is also of global importance. Dominican marine environments comprise part of the central Caribbean ecoregion, which has received the highest biological value ranking from both Conservation International and the WWF, who have listed the region as among the top 5 conservation priority ecoregions in the world. The country hosts 4 of the world's 7 sea turtle species (quelonios). The Samana Bay and offshore banks (Banco La Plata) also support the largest Atlantic calving population of humpback whales. Species such as the queen conch (*strombus gigas*), spiny lobsters (*P. argus* and *guttatus*), hawksbill turtle (*Eretmochelys imbricata*) and manatee (*Trichechus manatus*) deserve particular conservation effort because they are of commercial interest and thus subject to increased pressure.

3. The Dominican Republic's terrestrial biodiversity and some elements of its marine, is primarily found in protected areas within its National Protected Area System (NPAS). The above mentioned Hispaniola pine forest, the Hispaniola humid forests, and the wetlands of the Enriquillo basin, are found almost exclusively within the protected area system. The national protected area system currently consists of 86 sites of various IUCN categories that cover nearly 11,500 km^2. Although the existing national PA system covers nearly 24% of the country, the system does not safeguard critical biodiversity. There are two primary reasons for this. At the systemic level, the system's effectiveness and sustainability are constrained by several key barriers. These include ecological, organizational and institutional, legal, regulatory and policy, and financial barriers. Secondly, individual PAs are confronted by specific threats to both their habitats and species. These threats and barriers undermine the sustainability of the national PA system at the site level, and thus the long-term national environmental, social and economic benefits that would accrue from an effectively established and managed national PA system. This project presents a two-pronged approach to the removal of the barriers and the decrease of threats. It does so by addressing the challenges at both levels – the removal of the systemic barriers, and the strengthening of the management effectiveness of individual key areas that in the project used as pilot sites for the development and testing of key interventions. Thus, in conjunction with the removal of key barriers at the national system level, This site level work also provides the basis for the up-scaling and dissemination and replication of the best practices and lessons learned throughout the national system, the ecoregion, and beyond.

[1] IUCN, Insular Caribbean WCPA Report to the World Parks Congress, Durban 2003.
[2] Dinerstein, *et.al*., Conservation Assessment of the Terrestrial Ecoregions of Latin America and the Caribbean, World Bank, 1995

4. The project goal is to help safeguard the globally significant biodiversity values of the Dominican Republic. The project objective is to enhance the sustainability and conservation effectiveness of the national PA system**,** and its contribution to national sustainable development. To achieve this objective, the project will produce the following five outcomes: 1) the enabling environment for the national protected area system will be enhanced; 2) the management capacity of PAs will be strengthened and their management effectiveness increased; 3) PAs will be supported through innovative partnerships, and their planning and management will involve stakeholders and will provide benefits to local communities; 4) awareness of and support for biodiversity conservation and PAs will be increased among all stakeholders; and 5) networking and collaboration among PAs will be improved, and the best practices and lessons learned will be disseminated and replicated within the national PA system, the Caribbean region, and beyond.

5. This project is a particularly important and timely intervention for several reasons. First, the high number (86) of PAs protect globally significant biodiversity but are essentially not managed today, and in the rare cases where they are, the management is not effective due to the existence of the barriers whose removal this project will address. Secondly, threats to biodiversity in the NPAS are steadily increasing and the NPAS's sustainability is coming under increasing risk. Without the immediately required "re-engineering" of the NPAS, significant habitats and biodiversity will be lost and options for the future will be foreclosed. Thirdly, many baseline activities are being undertaken that provide a solid foundation upon which this project builds through key incremental interventions. This demonstrates a high interest and willingness on the part of the country to move forward in strengthening the NPAS. For example, a national policy for the NPAS is currently being developed. The NPAS policy, to be completed within six months, will provide an important basis for ensuring the project's success. The policy will require implementation, however, and this project would assist greatly in this regard, as well as filling in critical gaps that would still be outstanding. This project has established very close cooperation and synergy with the policy development project. In fact, the policy project coordinator is a member of this project's Steering Committee. While these baseline activities all make important individual contributions, there is still no coherent unifying framework for ensuring the NPAS's effectiveness and sustainability. This project provides this much needed and timely common framework for the coordination of on-going efforts, and the enhancement of the sustainability of the NPAS.

B – COUNTRY OWNERSHIP

1. Country Eligibility

6. The Dominican Republic ratified the Convention on Biological Diversity (CBD) on November 25, 1996 and is fully eligible to receive technical assistance from UNDP.

2. Country Drivenness

7. The project is fully consistent with and supportive of the Dominican Republic's national priorities and commitments. The Dominican Republic is investing much effort in promoting sustainable approaches to development, which is consistent with the Millennium Development Goals (MDG). The Dominican Republic is the only country to have established a Presidential Commission to monitor advances towards the MDG (Presidential Commission for Following Up the Millennium Development Goals – COPDES), and it has been incorporated as a pilot country in the United Nations' Millennium Project for estimating the costs to attain these objectives by 2015. COPDES has already produced two reports on its findings on advances in attaining these objectives.

8. The Dominican Republic has also developed its National Strategy to Fight Poverty (2002), which takes into consideration the Millennium Development Goals. This recognizes that poverty and environmental degradation are closely linked[3], and that specials efforts are needed to fight poverty while improving environmental

[3] SEMARN, 2004. Programa Nacional de Valorizacion de Areas Protegidas.

conditions. The implementation of the strategy is a top government priority and it is receiving support from UNDP and other technical cooperation agencies.

9. Recently, a country environmental profile was produced with USAID support, and a World Bank/UNDP Environmental Policies Project (WB-UNDP-SEMARN, 1998-2002) produced a general diagnosis of environmental issues, including a proposed National Environmental Action Plan and identified strategic priority actions. The identified recommendations are now starting to be implemented by the national government.

10. The conservation of biological diversity is an important component of Goal 9 of the MDG at the national level. The National Environmental Policies project (WB-UNDP-SEMARN, 1998-2002) identifies biodiversity conservation as a key element of and requirement for national sustainable development, and also the need to strengthen the National Protected Area System for that purpose. The Dominican Republic has made great efforts to advance the establishment and development of a sustainable National Protected Area System as an instrument for the conservation of its globally significant biodiversity and its diverse and extraordinary ecosystems, and by so doing, contribute to the country's sustainable development. In compliance with CBD, Art. 6 of, on General Measures for the Effects of the Convention and the Sustainable Utilization, a Biodiversity Vision (produced on a USAID supported project), and presently a Biodiversity Sectoral Law, are being finished. Also, a project for the Development of the National Framework for Biotechnology (UNEP-GEF) is currently being implemented, and work is being done to finalize the Guidelines for Access to Genetic Resources. A preliminary national database on invasive species has also been completed.

11. The need for sustainable environmental management for the Dominican Republic is very well demonstrated in the final draft of the United Nations Development Assistance Framework (UNDAF), which has a direct bearing upon biodiversity conservation and the sustainable management of protected areas. Another example of the efforts that the Dominican Republic is placing on biodiversity conservation and environmental sustainability is shown in the Country Program of the UNDP Multi-Annual Financial Framework (MYFF), which emphasizes the conservation of biodiversity and environmental sustainability as priorities for the country. This Program will contribute to strengthening the Dominican Government's participation in global environmental themes and initiatives, and in particular, the Convention on Biological Diversity.

12. The Dominican Republic is party to the major recent multi-lateral environmental conventions and agreements. The principal ones are summarized below.

Table 1: Main Multi-lateral Environmental Conventions to which the Dominican Republic is a party

Convention/Agreement	Date signed	Date ratified
CITES	3 March 1973	30 June 1982
CBD	13 June 1992	25 November 1996
Cartagena Protocol	18 August 1998	18 August 1998
SPAW	18 August 1998	18 August 1998
RAMSAR	2 February 1971	16 October 2001
UNCCD	17 June 1994	11 March 1997
UNFCCC	12 June 1992	7 October 1998

13. The project will also help facilitate the development of policies for the National Protected Area System, which is just starting. This is being done through the support of GTZ, USAID and others. This is an US$ 86,000 12-month project that is now into its fifth month of implementation. The project's product will be a draft policy for the NPAS. While the country has yet to develop a National Biodiversity Strategy, this project will provide a solid foundation and catalyst for the strategy's imminent preparation.

14. Tourism development is a national priority and it is expected that this project will also contribute to the establishment of a mechanism to maximize synergy between tourism and the conservation of protected areas, which will contribute to the sustainability of both.

C – PROGRAMME AND POLICY CONFORMITY

1. Programme Designation and Conformity

15. OP Conformity

Because the focus of the project is the entire NPAS of the country, which represents arid and semi-arid zone ecosystems, coastal, marine and freshwater ecosystems, forest ecosystems and mountain ecosystems, it equally conforms to all four Operational Programs (OP 1, OP 2, OP 3 and OP 4). The project is consistent with all of these Operational Programs by: promoting the conservation and sustainable use of biodiversity in these ecosystems; strengthening and expanding protected areas within them; promoting alliances and partnerships in protected area management; and supporting the development of alternative sustainable socio-economic activities among the local population so as to reconcile biodiversity conservation requirements with human needs.

16. SP Conformity

This project is compliant with GEF strategic priority BD - 1, Catalyzing Sustainability of Protected Areas. The project addresses gaps and key barriers to the efficient management and resulting sustainability of the Dominican Republic's national protected area system. It does so by supporting essential interventions to remove key barriers to the system's effectiveness and sustainability at the system level, and by developing, testing and demonstrating key interventions for the alleviation of specific threats at the site level, thereby acting as a catalyst. For the latter, specific PA sites will be used as pilot areas. These sites will be chosen during the PDF B on the basis of: (i) the presence in them of globally significant and threatened biodiversity; (ii) the inclusion of a mosaic of PA types, potentially including a strictly protected reserve, a terrestrial national park, a marine national park and a wildlife refuge; (iii) the strengthening of the management effectiveness of this sub-set of the national protected area system using innovative mechanisms for the Dominican Republic; (iv) an opportunity to develop and demonstrate community involvement mechanisms and sustainable biodiversity use options in the context of PA management for replication elsewhere; and (v) the opportunity to develop and test innovative financial biodiversity conservation management arrangements in a variety of contexts. The threats to biodiversity and barriers to effective management faced by the selected protected areas will be representative of the overall national protected area system. Thus, the project will offer many lessons for replication in other protected areas in the country. The project also will build upon lessons and best practices generated by other GEF BD - 1 interventions in the Dominican Republic. These lessons will be incorporated into the design of the full size project during the PDF B phase.

17. CBD Conformity

The project meets CBD objectives by fulfilling the requirements contained in the Convention's Articles 6 (General Measures for Conservation and Sustainable Use), 7 (Identification and Monitoring), 8 (*In-situ* Conservation), 10 (Sustainable Use of Components of Biological Diversity), 11 (Incentive Measures), 12 (Research and Training), 13 (Education and Awareness), and 17 (Exchange of Information). The project also responds to recent guidelines from the Conference of the Parties to the CBD, specifically Decision VII/28, on the adoption of a systems approach, and the importance of connectivity and capacity building and democratic governance. The project follows the guidance and decisions provided to the financial mechanism by the Conference of the Parties to the CBD.

18. The project is also consistent with GEF eligibility criteria, such as national policies, the participation of different key actors in the decision process, and replication of learned lessons of successful models.

2. Project Design

2.1 Problem Statement

2.1.1 The Environmental Context: Biological Diversity in the Dominican Republic

19. The Dominican Republic is very diverse, both physiographically and biologically. It has very singular bioclimatic and morphogenic features. It also has diverse bioclimatic zones, going from dry (450 mm/year) to humid (>2500 mm/year), varying with an altitudinal gradient, extending from 40 meters below sea level, up to more than 3,000 meters above sea level. Its geomorphologic diversity and its peculiar paleogeography has formed 9 different soil orders and more than 16 distinct bioclimatic regions, ranging from "thorny low hills" to "pluvious forests". Within the coastal-marine zones, the tropical characteristics and the submarine geomorphology generate an equally diverse pattern of marine environments that include very deep trenches, coral reefs, barrier islands, deep and shallow estuaries, and a great variety of keys and mangles. On this relatively small island one can find all varieties of tropical karsts hills (conic mogots, cupules, tours and platforms, as well as unique complex forms of granitic structures, such as inselberge and flat level platforms. Hispaniola is the only Caribbean island where one can find three of the four 4 tectonic elements of the island arc from the last part of the Cretacious and early Tertiary. This means that it keeps within itself all the information of what occurred within the border of the tectonic plates of North America and the Caribbean 65 million years ago. This rich and complex geological diversity and associated biodiversity occurs in a country of only 48,442 km^2.

20. The country's complex and diverse array of habitats supports a high degree of unique and globally significant biodiversity, in recognition of which it has been identified as a "Caribbean Hotspot". 30 endemic birds, including the threatened Ridgeway's hawk (*Buteo ridgwayi*) and the extremely rare La Selle's thrush (*Turdus swalesi.*) and the Bay Breasted cuckoo (*Hyetornis rufigularis*.), in addition to 11 other endemics, are considered threatened. An additional 270 migratory bird species are found in the country's natural areas, which constitute important components of the eastern flyway. Among these are the threatened Kirtland's warbler *(Dendroica kirtlandii),* Bicknell's thrush *(Catharus bicknelli),* and Cape May warbler (*Dendroica tigrina.*). The country's terrestrial biodiversity shares a 30% co-endemism rate with the island of Cuba, highlighting the Dominican flora's and fauna's critical importance to the broader Antillean biodiversity profile. Three of the nation's terrestrial ecosystems, the Hispaniola pine forest, the Hispaniola humid forests, and the wetlands of the Enriquillo basin, have been identified as being among the top conservation priorities for the ecoregion.

21. Dominican marine biodiversity is also of global importance for the conservation and reproduction of endangered species, especially those that are of commercial interest and subject to increased pressure, such as the queen conch (*strombus gigas*), spiny lobsters (*P. argus* and *guttatus*), hawksbill turtles (*Eretmochelys imbricata*) and the manatee (*Trichechus manatus*). The region supports 4 of the world's 7 sea turtle species (quelonios). The Samana Bay and offshore banks (Banco La Plata) also support the largest Atlantic calving population of humpback whales. Dominican marine environments comprise part of the central Caribbean ecoregion, which has received the highest biological value ranking from both Conservation International and the WWF, who have listed it as among the top 5 conservation priority ecoregions in the world.

Global Biodiversity Significance

22. Globally significant biodiversity in protected areas is highly represented by endemic species. Areas of the country with highest endemism are found within the PA system. The following table presents an indicative summary of endemism rates of species in some of the principal national PAs.

Table 2: Occurrence of endemic floral and faunal species in relation to ecosystems in some protected areas

Protected Area	Principal Ecosystems	Number of Endemic Species	
		Flora	Fauna
Loma Nalga de Maco National Park	Broadleaf humid forest	46	24
Sierra Martín García National Park	Broadleaf semi-humid forest, Dry forest	19	11

Sierra de Neiba National Park	Broadleaf humid forest, Cloud forest, Pine forest	174	58
Sierra de Bahoruco, Wildlife Refuge Bahoruco Oriental (Sierra de Bahoruco) National Park	Broadleaf humid forest, Broadleaf semi-humid forest, Pine forest, Cloud and high altitude humid palm forest	615	43
Jaragua (Procurrente de Barahona) National Park	Dry forest, coastal wetlands, lagoons, mangroves and adjacent marine habitats	76	51
Los Haitises National Park	Broadleaf humid forest, mangroves and adjacent marine habitats	130	28
Del Este National Park	Semi-humid forest, mangroves, and adjacent marine habitats	53	28
Diego de Ocampo Natural Monument	Broadleaf humid forest and high altitude humid palm forest	54	19
Loma Isabel de Torres Natural Monument	Broadleaf humid forest	51	12
Loma Quita Espuela Scientific Reserve	Rain and cloud forest	74	48
Barbacoa, Las Neblinas, and Ébano Verde (Barbacoa-Casabito Sub-region) Scientific Reserves	Broadleaf humid forest, rainforest and high altitude humid palm forest	423	62

Table 3: Globally Significant Biodiversity

Biodiversity in the Dominican Republic/Protected Areas System	Global Significance
Plant and animal species	All species included in CITES Appendixes
150 plant and animal species	In IUCN Red List
34 amphibians species	Threatened in Global Amphibians Assessment
Solenodon paradoxus	One critically endangered species of family with only two globally known species of mammals
Plagiodontia aedium	One critically endangered species of a group of endemic West Indian rodents
All 28 endemic Hispaniolan Birds	Present within Jaragua-Bahoruco-Enriquillo Biosphere Reserve
Migratory bird species	North American migratory species winter in the Dominican Republic, including the much restricted *Catharus bicknelli*
Sula leucogaster	Largest West Indian breeding colony
Columba leucocepphala	Largest West Indian breeding colony
Eretmochelys imbrica	Highest globally registered density of juveniles
Megaptera novaeanglia	Highest concentration of Western Atlantic breeding population
Megaptera novaeanglia	Highest density of Western Atlantic whelping females

2.1.2 National Protected Area System

23. To safeguard its biodiversity and unique ecosystems, prior to the year 2000, the Dominican Republic had already designated 19% of its land and 11% of its territorial waters under various forms of protection. In 2000, the Dominican Republic adopted a new and comprehensive organic natural resources law (General Environmental and Natural Resources Law, No.64-00, of August 18, 2000) that consolidated all legal dispositions which had been dispersed, raised environmental and natural resource management to the level of a Secretariat of State (Ministry level), and placed protected area management under the Under-Secretariat of State for Protected Areas and Biodiversity. New sector-specific[4] legislation for protected areas was promulgated, and an additional 16

[4] Ley Sectorial de Áreas Protegidas No. 202-04 del 30 de junio del 2004

areas were added to the existing protected area system that raised the coverage of protected areas to 23.76% of the national territory.

24. The table below illustates the current components of the national PA system, their areas, and responsibility for their management. Please see Annex 2 for additional information on all of the national PAs and Annex 3 for a map of their distribution as of 2000.

Table 4: National Protected Area System Components

PA Types and IUCN Management Categories	Number	Area (km^2)*	% of National Territory	Management Authority
Strictly Protected Areas (IUCN Ia)	**8**	**199.28**	**0.42**	Sub-Secretariat for PAs and Biodiversity
A. Scientific Reserves (Ia)	6	177.28	0.37	
B. Marine Mammal Sanctuaries (Ib)	2	22.00	0.05	
National Parks (IUCN II)	**19**	**7,931.19**	**16.46**	Sub-Secretariat for PAs and Biodiversity
A. National Parks (terrestrial) (II)	17	7,921.76	16.44	
B. Marine National Parks (II)	2	9.43	0.02	
Natural Monuments (IUCN III)	**17**	**449.57**	**0.94**	Sub-Secretariat for PAs and Biodiversity
A. Natural Monuments	17	449.57	0.94	
Wildlife Refuges (IUCN IV)	**15**	**276.39**	**0.57**	Sub-Secretariat for PAs and Biodiversity
A. Wildlife Refuges (IV)	15	276.39	0.57	
Protected Landscapes (IUCN V)	**11**	**290.20**	**0.60**	Sub-Secretariat for PAs and Biodiversity
A. Scenic Roads (V)	9	190.82	0.40	
B. National Recreation Areas (V)	3	99.38	.20	
Natural Reserves (IUCN VI)	**15**	**2,303.62**	**4.78**	Sub-Secretariat for PAs and Biodiversity
A. Forest Reserves (VI)	15	2,303.62	4.78	
TOTAL	**86**	**11,450.26**	**23.76**	

***** The area figures are not entirely accurate due to the confused legal definitions of the categories, the definition of actual PA boundaries, and the differentiation between terrestrial and marine components in areas which consist of both.

25. One of the PAs, Lago Enriquillo National Park, is the country's only Ramsar site. Three of the protected areas, Jaragua, Bahoruco and Lagoon Enriquillo National Parks, comprise the cores of a recently designated Biosphere Reserve.

26. On the basis of current legislation, there has also been a movement to establish private protected areas. The recently created Private Wildlife Refuge, "Los Quemados", situated in Azua Province, as well as the Official Declaration of Municipal Protected Wildlife Areas by the Municipality of Pedernales, are concrete examples of the interest of NGOs and local governments to conserve biodiversity through the creation and management of such protected areas. It should be pointed out that the establishment of private protected areas does not entail the privatization of existing public protected areas but rather the inclusion of private property in habitat and species conservation efforts.

27. The national system of protected areas also includes important cultural-historical sites. The Jose Maria Cave in the East National Park (Parque National del Este), with more than 1,200 pictographs, is considered unique in the Americas, and this was one key element for the proposed declaration of this national park as a cultural World Heritage Site by UNESCO (designation in process). In this same park are found two of the oldest shipwrecks in the North American continent, but they are still without appropriate protection. Within the system is also found the Cave of Wonders ("Cuevas de las Maravillas") and "el Pomier" (Borbon). The latter site possesses one of the highest concentrations of cave art in the Antilles. Other important examples of pictographs illustrating various aspects of the original cultures are found in other protected areas, such as in Los Haitises and Jaragua National Parks.

28. The Dominican protected areas system, however, is confronted by a number of threats as well as barriers to realizing its effectiveness in conserving biodiversity and to its sustainability respectively. These threats and barriers undermine the sustainability of the entire PA system and the management effectiveness of the individual PAs, and thus the long-term national environmental, social and economic benefits that would accrue from an effectively established and managed national PA system.

29. The historic development of the existing national PA system was principally driven by a concern to conserve specific species and unique features, as opposed to having been planned to protect landscapes and ecosystems and ecological processes, in addition to species. Its development was also opportunistic and not strategic. While this is typical of many countries' PA systems, the result is that many areas that are still very important for ecological functions as well as for the conservation of biodiversity overall, have been left out of the existing system. There still is no agreed upon and ecosystem based framework or strategy for guiding the growth and expansion of the national PA system. There is no national system plan for the PA system's development.

30. Although the existing national PA system covers nearly 24% of the country, it does not safeguard critical biodiversity. There are numerous reasons for this. First, following the passage of the new PA law in 2000, the system's coverage of important and unique habitats has actually been reduced. The law was born of compromise and thus removed certain areas from the system by making them available to private investors and/or for commercial exploitation purposes, while adding areas of comparatively less biological or cultural importance. Most of the existing protected areas are also of inadequate size to conserve all of their biodiversity in the long term. This size inadequacy is further compounded by the fact that there are no corridors between existing protected areas that would help counteract this size limitation, and also improve the coverage of important ecosystem elements that are not currently protected.

31. Under present conditions, the large number, diversity, and dispersed nature of the protected areas is overwhelming for a small country with limited management and financial resources. The associated financial, administrative, and logistical constraints in the face of demands have resulted in a plethora of completely unmanaged or semi-managed areas within the system. Where managed, the management is generally administrative and there practically is no active management to protect and enhance their rare and unique biodiversity. Prior to the expansion of the system following the passage of the new PA law in 2000, only 13 protected areas had management plans, action plans, and/or were the subject of significant study to establish a baseline, and only 35 (of the then 70 protected areas) had personnel to attend to them[5]. Very significantly, only four of the protected areas have been officially delineated.

32. As a consequence of the foregoing, the majority of the protected areas within the system are subject to informal "management" by the local populations that ultimately exposes critical biodiversity to anthropogenic threats, such as the conversion of critical habitats to uses such as agriculture and grazing, the illegal appropriation of territories, the introduction of non-native species, and illegal hunting and fishing. In such an unregulated environment, local residents seek solutions to alleviate poverty and the underlying issues of limited access to productive employment opportunities and credit. In the case of many of the protected areas, large portions have been appropriated or converted to productive uses thus eliminating portions of the ecosystems that were originally targeted for protection. These threats to the PAs and their biodiversity and discussed in more detail in section under the Root Causes and Barriers section.

33. In addition, there are numerous institutional and organizational, legal, regulatory and policy, administrative, financial, information and other limitations to the development and functioning of an effective national PA system and effective management on site. These are also discussed in greater detail under the Root Causes and Barriers sections.

2.1.3 Legal and Policy Context

[5] Ibid.

34. Law 64-00, the General Law for Environment and Natural Resources, created the Secretariat of State for Environment and Natural Resources, and provides the main legal framework for the conservation and management of the country's biodiversity. Law 202-04, or the Sectoral Law for Protected Areas, deals exclusively with the National Protected Area System. This law was born out of a compromise between nature conservation and development interests and thus has generated serious controversies among key stakeholders concerning the management of the protected natural areas in the country.

35. Legally, the administration of protected areas may be done with the participation of other actors, paving the way for potential co-management initiatives. There exist at present 10 co-management agreements iincluded in 5 different modalities. The co-management modalities are to be considered in the Institutional and Administrative Framework component of the on-going GTZ/USAID (and others) funded project "Policies for the Management of the National Protected Area System".

2.1.4 Institutional and Organizational Context

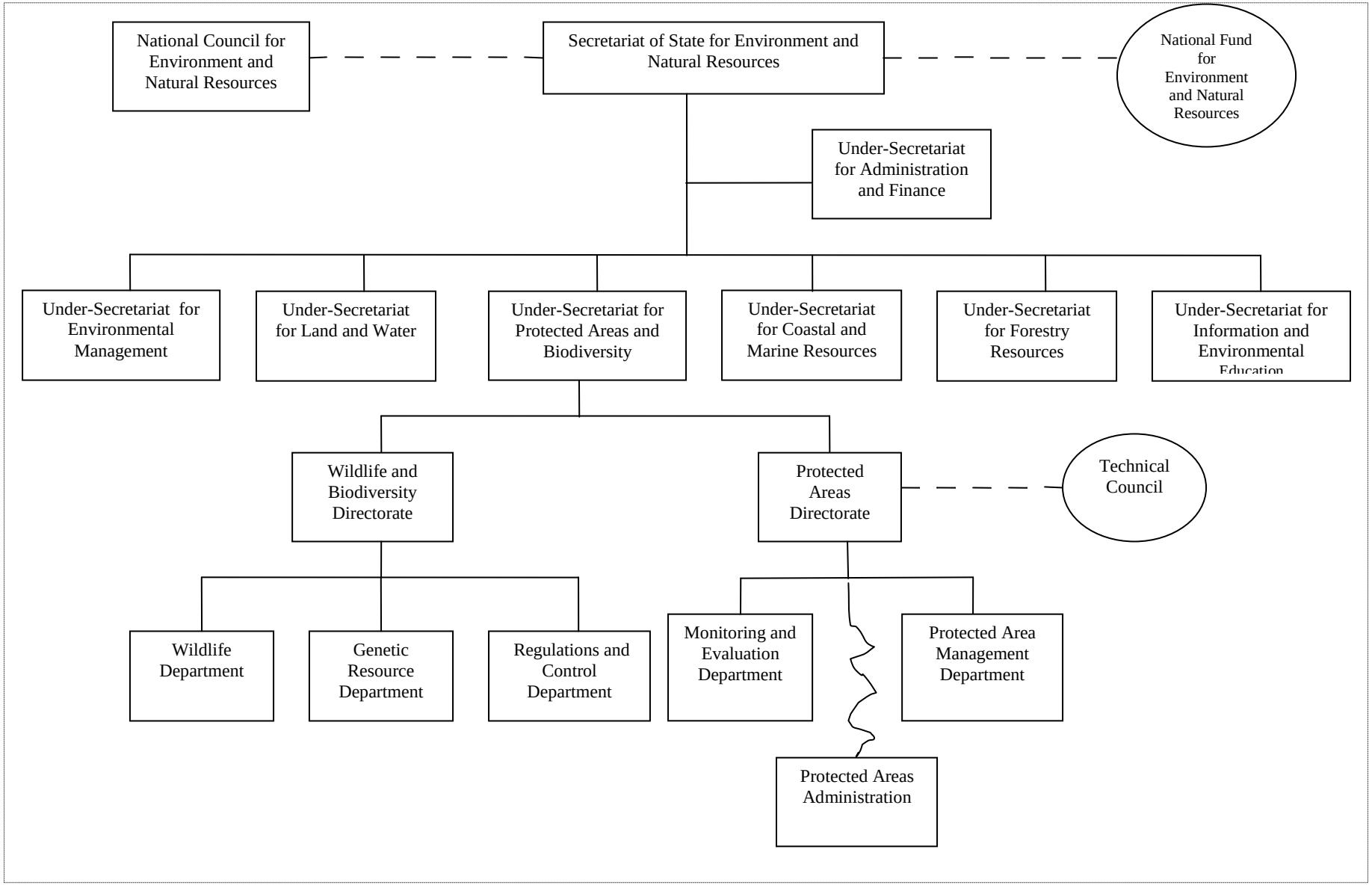
36. The organization of biodiversity and PA management in the Dominican Republic is illustrated below.

37. The Secretariat of State for Environment and Natural Resources (SEMARN) is responsible for the application of the Sectoral Law for Protected Areas. This is a Ministry level Secretariat that depends on the National Treasury for budgetary appropriations for the protected areas. The Under-Secretariat for Protected Areas and Biodiversity is responsible for the administration and management of all the national protected areas. Its mission is to contribute to the conservation of biodiversity as a base for sustainable development and the improvement of life quality through the application of norms and regulations and the administration of the national system of protected areas. The Under-Secretariat for Information and Environmental Education's main function is to establish, maintain and continuously update a geographical information system, as well as to coordinate and guide the development of environmental educational and awareness projects. The Wildlife and Biodiversity Directorate is responsible for wildlife management at the national level, and its conservation and sustainable use, through the undertaking of studies and the administration of regulations, both nationally and internationally. The Department of Wildlife coordinates and promotes scientific research for the preservation and management of species and habitats.

2.1.5 Socio-Economic Context

38. The country is administratively divided into 31 Provinces and one National District. 17 of the Provinces include the coastal zone in which fishing and tourism are the primary economic activities. Tourism and the existence of tax free industrial zones constitute the primary drivers of the national economy. According to the latest national population census of 2002, the country's population was 8,565,541, of whom 49.78% were male and 50.22% female. 68% of the population is urbanized, primarily in the capital of Santo Domingo, and the remaining 32% is rural. According to the 2005 projections from CEPAL (Economic Commission for Latin America and the Caribbean), the population is growing at 1.6%, which represents a continuing decline characteristic of the past two to three decades. Official unemployment is at 17%. The 2005 UNDP National Human Sustainable Development Report, however, noted that there has been noticeable continuing progress in the social conditions in the country. Nevertheless, this progress has not met expectations given the economic growth of the country over the past 50 years characterized by an annual average growth of 5%. The UNDP report also noted the continuation of a significant social deficit in education, housing, public health and environmental health, and the large existing societal gap in terms of access to services.

Figure 1: Selected components of the organizational chart of the Secretariat of State for Environment and Natural Resources, emphasizing the areas related to natural resources, biodiversity conservation and protected areas



2.1.6 Baseline – Threats, Root Causes and Barriers

Threats to Biodiversity in Protected Areas

39. The work of national experts and consultations and workshops conducted with key stakeholders during the PDF A permitted the preliminary identification of immediate threats to the PAs and, specifically, to their biodiversity. Two principal immediate threats were identified:

1. The loss and degradation of important habitats inside of PAs due to**:** a) the growing incursion of agriculture and livestock grazing into PAs; b) the expansion of tourism infrastructure in and around PAs; c) mining; d) forest fires; and, e) terrestrial and aquatic pollution.
2. Negative effects on particular species in PAs as a result of: a) fishing and illegal hunting; b) the illegal collection of flora and fauna; c) the introduction of alien species; and d) the presence of feral animals (dogs, cats, pigs, goats, *Herpestes aeropuntatus*).

40. All of these threats negatively impact the ecosystems and species within the entire NPAS, varying only in location and intensity.

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Agriculture and grazing

41. The surface area dedicated to agriculture and animal husbandry activities is increasing every day, bringing with it perturbations, destruction or replacement of ecosystems and their floral and faunal components. Between 1993-1997, the agricultural sector grew to an average rate of 5% per year. By 2004, agricultural and grazing lands activities occupied 53.4 % of the total surface of the country. The expansion of theses activities eliminates in many cases, small habitats for species with low populations, with very restricted geographical distribution, of which many are endemic and threatened. "Slash and burn" agricultural practice, or shifting cultivation, still very common among small, resource poor farmers, presents a very important threat to biodiversity and protected areas, given the magnitude of the areas dedicated to this activity.

Tourism development

42. Tourism as an economic activity has increased markedly during most of the last five years. The growth rate of this sector has been increasing faster than the other traditional sectors during the last 10 to 15 years. Between 1993-1997, tourism grew at an annual average rate of 15 %, and the rate is still increasing. The increasing surface area dedicated to infrastructure for tourism also results in the loss of important habitats, especially in coastal-marine ecosystems.. The impact of tourism to biodiversity is considered high in the coastal forests, on beaches, in estuaries, mangroves, coral reefs, and marine pastures, where ecosystems are seriously threatened.

Mining

43. The expansion of mining activities, for sand and other resources, also constitutes an important threat to biodiversity, which could cause the loss of critical habitats for endemic and rare, geographically restricted species.

Forest fires

44. Forest fires also present a growing a threat to biodiversity, particularly in pine forests and dry habitats. Each year, hundreds of hectares of forests are burned by fires. Between 1962-2004, there were 5,629 fires, which affected a total area of 2,828 km^2. The frequency and magnitude of these forest fires is increasing which is a cause for concern. The areas most affected by forest fires are found in protected areas of the Central Mountain Range, and in the Bahoruco Sierra. The fires that occurred in March 2005 were in the Central Mountain range, within the Jose del Carmen Ramirez and Armando Bermudez National Parks, These were some of the most damaging fires in known history, affecting an area of 200 km^2. The increase in the frequency and magnitude of these fires poses a serious threat to biodiversity through the drastic reduction of populations and changes in species compositions.

Fishing and hunting

45. The overexploitation of fish and the excessive extraction of specific individuals through hunting, can bring

many species close to extinction. The disrespect for regulations (complying with established size and limits), and the disregard for restricted periods, can also cause many species to become extinct. In 2000, it was realized that the number of fishermen, boats, and docks have all been increasing in number during the preceding 14 years, which ultimately may result in the collapse of some fish resources in the country. The use of inappropriate fishing gear also can result in the illegal capture of juveniles, which undermines stock sustainability. The number of hunters in PAs is also on the increase. Many of these processes are occurring in protected areas, such in Jaragua, Del Este, and Los Haitises National Parks. These illegal activities, if unchecked, can reach levels which will have dramatic negative effects on the affected populations in the PAs.

Illegal collection of flora and fauna

46. The illegal extraction or collection of flora and fauna in different habitats of the country is also a threat to biodiversity. The illegal collection of cactus, palm trees and other species within protected areas is increasing.

Alien species

47. Being on an island, the terrestrial biodiversity of the Dominican Republic is particularly vulnerable to the adverse effects of invasive alien species. The introduction of alien plants and animals onto this island started with the arrival of Europeans at the end of the 15th century. The process has continued over time and is increasing with the growing commercialization of exotic species. Cultivated varieties of *Leucaena leucocephala* and *Calliandra calothyrsus* were introduced starting in the 1980s, and today they invade several ecosystems, transforming them and threatening native endemic flora and fauna species. Several introduced bird species, among them *Ploceus cuculatus*, *Lonchura punctulata*, and *Lonchura malaca*, compete and replace native species, as was the case with *Rana catesbeiana*. Several protected areas in the system are particularly affected by the propagation of exotic species.

Terrestrial and aquatic pollution

48. The degree of contamination of water bodies in the country also presents a threat to biodiversity, particularly in the coastal-marine environment. Low levels of environmental awareness and ineffective municipal environmental management and control contribute to this situation. There is increasing production and accumulation of solid wastes, and a corresponding increase in the contamination of fresh water bodies and coastal and marine ecosystems. High levels of fresh water contamination result in the degradation of ecosystems and reductions in populations of affected species due to the reduction of dissolved oxygen and the toxicity of the dissolved elements and compounds.

Feral animals

49. The presence of feral animals (dogs, cats, pigs, goats) in PAs presents a threat both to habitats and species. The impact of feral animals is particularly accentuated in an island environment due to the presence of many endemic species and species with very limited distributions due specific habitat requirements, which are also generally restricted. While feral animals may be considered as alien species, the threats and impacts presented to native biodiversity from an exotic plant in one location are not the same as those arising from the presence of a growing number of feral animals in many PAs. Thus, feral animals are seen as a distinct threat.

Root Causes

50. Some of the underlying root causes of these threats include: a) rural poverty leading to the undertaking of illegal activities to obtain resources and generate income for subsistence or commercial gain; b) public policies that do not harmonize development and conservation; c) economic incentives which promote environmental degradation; d) lack of an agreed upon national land use plan; e) lack of clarity concerning land tenure resulting in the boundaries of many PAs not being defined or known; f) the uninvolvement of local populations in conservation management and decision-making processes in the PAs and adjacent areas and the related absence of benefits accruing to local populations through conservation; g) growing societal demand for natural resources; h) the availability of few alternatives for income generation for local inhabitants around protected areas; i) insufficient consideration of biodiversity values in macroeconomic decisions; j) high levels of insensitivity and/or lack of knowledge at high levels in the judicial system concerning the value of biodiversity and natural resources, k) low management capacity of the PA and other environmental management authorities; and l) weak enforcement of environmental regulations at all levels.

51. The foregoing threats, and possibly others, and their root causes, will be analyzed in greater depth during the PDF B phase. In doing so, particular emphasis will be placed on determining the extent and the actual biological and ecological significance of these threats so as to focus the project's interventions in the most effective manner.

2.1.7 Barriers to PA System Sustainability and PA Management Effectiveness

52. During the PDF A, numerous barriers have been identifed at the systemic level which constrain the overall effectiveness and sustainability of the NPAS, as well as barriers which limit the management effectiveness at the PA site level. The primary barriers identified to date include the following.

Systemic barriers

1. Basis of PA system design

53. The current PA system is a historical by-product of a non-strategic approach to its development, and reflects compromises with other competing interests. Following the passage of the PA Law in 2004, some important habitats, particularly shoreline and beaches, were sacrificed to development interests and were excluded from PAs while less important habitats were included in the PA system as compensation. Although there are zones that function as biological corridors, they are not designated or managed as such. This could affect the long-term viability of certain species due to the low level of genetic exchange. Neither are there buffer zones that function as they are intended. Overall, there is little understanding of the concepts behind both biological corridors and buffer zones.

54. Barriers: No far-sighted development planning for the system due to the absence of an ecosystem based national PA Strategy or system plan to define habitat conservation requirements and priorities and guide the development of a national PA system in a manner that effectively conserves the range of the country's biodiversity.

2. Organizational and institutional structures and processes for the PA system's administration and management

55. The current highly centralized and vertical command-control PA administration structure is not the most appropriate model through which effective responses to management challenges can be developed and efficiently implemented at the PA level. This type of structure is not very responsive to management requirements and needs at the PA level and is not conducive to the development of mutual understanding and partnerships at the PA level, something that is a pre-requisite for effective relations with local communities. The structure also results in inefficiencies in financial and personnel management and the effective allocation of scarce resources. This structure is traditional and characteristic of government administration in general. Thus, it is also symptomatic of the segmentation of inter-ministerial and intra-ministerial roles and responsibilities resulting in low levels of inter-ministerial and inter-departmental collaboration, which promotes additional inefficiency in the use of scarce financial resources.

56. The human resource deficit is reflected in the severe lack of personnel for managing the system of PAs. For example, based on the assumption that for each 5 km^2 of protected area, there is the need for one ranger, the deficit of park rangers within the system currently stands at 2009. Most of the field personnel is inadequately trained for the management requirements, and there is a near absence of multi-disciplinary backgrounds among personnel working in the NPAS.

57. There is also a lack of national procedural manuals to guide the efficient undertaking of administrative, financial and technical functions, both at national and protected area levels. This maintains the centralization of the decision making process, which constrains the development of decision making and capacity building at the PA level.

58. Barriers: This project clearly is not proposing the restructuring of the governmental administrative and management apparatus. Within the scope of the project, however, certain specific barriers to improved effectiveness and efficiency of the PA system's management have been identified. First, there are no successful models of decentralized and participatory approaches to PA management in the country. Secondly, there is no national level coordinating mechanism for PA related decisions. Thirdly, there are no system-wide standardized procedural manuals, or Terms of Reference for PA staff positions or implemented performance reviews for most PA staff. Also, there is no national program for training PA staff so as to continually upgrade their skills sets.

3. Legal, regulatory and policy base governing the PA system's administration and management, and the PA system's relations with other national planning and development processes affecting land, water and biodiversity

59. National PA legislation has been changed three times over the past six months and the current version was born out of compromises with development interests and has not been assessed for errors and contradictions and other shortcomings. The existing legal framework, which includes laws, rules, decrees, and resolutions, is confusing and ambiguous and is inappropriate for the effective establishment and management of the protected areas of the Dominican Republic. There is lack of legal clarity, for example, concerning boundaries of many PAs. Likewise, there are errors in the application of the IUCN PA categories in the classification of some of the system's PAs. This inappropriate designation by management categories leads to negative effects on the PAs due to the permissible uses under different categories. This confusion and ambiguity hinders opportune interventions for the expansion and strengthening of the NPAS. Also, there is a pronounced absence of many essential regulations for implementing PA legislation, such as the General Environmental Law, and related procedures, for different activities in PAs (scientific research, public uses, etc.). The development of implementing regulations has been stalled due to other governmental priorities.

60. The PA legislative and regulatory base also is not linked to land use planning and development and natural resource use sector policies. Public policy does not integrate biodiversity conservation with economic development. Economic incentives promote development at the expense of biodiversity and natural areas. There is a lack of connection between the NPAS and macroeconomic policy. This results, for example, in the preparation of development plans for tourism which damage PAs and species within protected areas, in the formulation of public policies that have a negative impact on protected areas, and, especially, in the absence of land use plans which integrate conservation requirements with other potential uses of land. This situation creates conditions for heightening antagonism among the different sectors, and often results in the construction of infrastructure and the undertaking of other activities that are detrimental to the protected areas.

61. Also, there is still no endorsed national PA policy, although one is currently being developed.

62. Barriers: A key barrier to the strengthening of the PA system and its effective management is presented by the national PA legislation's deficiencies, as well as the absence of key implementing regulations. Another barrier lies in that there is no functioning mechanism or process for integrating PA system development requirements and biodiversity conservation with national territorial and development planning processes. Also, there do not exist incentive mechanisms in the existing legal, regulatory and policy framework for conserving biodiversity.

4. Under-financing of PA system relative to management needs and undeveloped supplementary financing mechanisms to help offset the shortfall

63. The current centralized financial mechanism for the NPAS does not promote the system's development and sustainability due to under-financing relative to management needs and the irregular flow of funding to PAs from the central government. PA legislation, however, does provide for supplementary revenue sources, such as payments for environmental services, but these remain undeveloped. The funds for PAs come from the National Government Budget; a Special Fund, made up 67% of the resources generated by the PAs (fees for visiting PAs, contracts with tour operators to PAs, concessions for different uses of PAs); donations by the international bilateral cooperations, loans, national and local NGOs, and others. Funds generated by PAs cannot legally be directly used by the PAs. Considering that currently only 35 out of the country's 86 PAs (40% of the PAs) have some personnel and infrastructure for their management, and the annual budget for the Sub-Secretariat for

Protected Areas and Biodiversity is 5.2 million USD per year, to cover the total NPAS needs would require an additional amount of at least 7.8 million USD per year. This figure does not include additional investment requirements.

64. Barriers: While PA legislation provides for the establishment of additional sources of revenue for PAs, there are no models for doing so. There is a lack of information and studies on supplementary financing opportunities and the application of innovative financial mechanisms for supporting the NPAS. Also, there is a small PA constituency within government and the public. This contributes to the setting of a lower priority for PA management needs in the budgetary allocations.

The above systemic barriers will be analyzed further during the PDF B.

Barriers to PA management effectiveness

65. Aside from the barriers that exist at the systemic or national level, PAs themselves are confronted by a set of barriers that constrain their management effectiveness, and thus contribution to the conservation of their biodiversity. These are summarized below

66. Only 13 of the country's PAs have Management Plans or Operational Plans. In the absence of Management Plans it is next to impossible to set proper priorities and guide PA management and operations in an effective and cost efficient manner.

67. Related to the near absence of Management Plans, is the fact that there persists a lack of clarity concerning land tenure in and around PAs. This inevitably results in numerous conflicts and the putting to use of PA lands and purported buffer zones to activities that are detrimental to the PAs and their biodiversity.

68. All of the PAs in the system also suffer from either completely non-existent or very limited on-site management capacity to undertake proactive management and enforce compliance with legislation and regulations when required. This low capacity is reflected in personnel numbers, their training, infrastructure, operational and administrative procedures, and in strained relations with adjacent communities and land users. In fact, approximately one half of the PAs have no staff attached to them and are not managed by any other agency's personnel.

69. There is also a general absence of basic biodiversity information, and of biodiversity research and monitoring programmes in PAs. Thus, basic and up to date information on biodiversity and PAs, and their values, including economic values, is largely unknown. Because of this, management may be compromised and, PA values are not weighed in decision-making to the extent that they should be. Basic information on biodiversity needs upgrading, and monitoring must be improved so as to undertake adaptive management in order to make most efficient use of scarce operational resources.

70. Experience from around the world demonstrates that effective PA management and sustainable conservation of biodiversity can best be achieved through partnerships, the involvement of local populations and the sharing of benefits arising from PA conservation management. Mechanisms for stimulating local involvement and partnerships and the sharing of benefits are not developed. Conflicts continue to mount and illegal activities in PAs continue to increase because conservation is not seen as a matter of self-interest. Co-management mechanisms are undeveloped. Many still believe that the government is the only one responsible for managing protected areas.

71. Related to this is that there are no incentive mechanisms for conserving biodiversity, neither for local residents, nor PA staff, nor other land users, including those from the private sector. The lack of support from different sectors is limited by the absence of mechanisms for communication and feedback among them.

72. However, even if local residents were willing to stop illegal activities in PAs or change resource utilization practices for the benefit of biodiversity, there are no enabling financial mechanisms to stimulate alternative sustainable and biodiversity friendly livelihoods.

73. The lack of support for PAs and biodiversity conservation can also be attributed to an under-developed environmental consciousness and awareness of biodiversity and of the PAs' roles and functions among local populations and many decision-makers. For the most part, the PAs do not have biodiversity and PA awareness raising programs to overcome this barrier.

74. The current PA administrative structures are also not appropriate for the range of management requirements at the site level. The current structures does not provide for performing some of the essential tasks in the PAs, aside from protection. These tasks include community relations, monitoring, and public education.

2.2 What Would Happen Without GEF (Baseline Scenario)

75. Many supportive baseline activities are currently being undertaken by the government and other stakeholders to strengthen the NPAS. These are presented in Annex 4. However, in spite of these initiatives, under present conditions, the high number of protected areas in the NPAS, their diversity and associated specific management requirements, and the growing threats to them and to their biodiversity, will continue to overwhelm the capacity of SEMARN to effectively overcome them. This is the rationale for the BD 1 approach of this project.

76. Important habitats will remain outside of the PA system since there will not be a nationally endorsed and supported system plan or strategy for the rationalization and further development of the NPAS.

77. The likelihood of species extinctions in the PA system will increase due to a lack of connectivity in the system and inappropriate categorization of individual protected areas. In particular, the status of coastal and marine ecosystems will decline due to under-representation in the system. While additional private conservation reserves will likely be established, they will not offset the increased threat of extinctions.

78. Under the current framework, the financial resources secured for the NPAS through the governmental budgetary process will remain stable, or perhaps even decline in relation to growing needs. Potentially significant supplementary financial resources that could be generated through innovative financing mechanisms, such as payments for environmental services and the Environment and Natural Resources Fund will remain undeveloped. Consequently, the large deficit in required financing will continue, and may grow if financial resources decline. This will have serious negative consequences for the entire NPAS in terms of its capacity to actually effectively manage and conserve the PAs and their biodiversity.

79. Administrative structures and processes will continue to present barriers to effective and efficient management of the NPAS and individual PAs in the system. Deficiencies in the legal framework for PA management will also continue to present a poorly defined environment for the planning and management of the system

80. Local stakeholders will continue to be excluded as partners in conservation. This will have two major repercussions. Threats to biodiversity will continue, or may grow, as local stakeholders will continue to see and realize no benefits to be derived from conservation, and therefore will continue to exploit the resources of PAs. Due to the absence of partnerships and the lack of engagement of local communities, limited existing PA staff will be further stretched in performing conservation-related tasks.

81. The NPAS will continue to have a low profile in the political, and particularly in the economic planning process. Thus, any necessary political impetus or support for rectifying the baseline situation will not emerge. As a result, SEMARN will be unable to institute key necessary changes to improve the PA system's sustainability.

2.3 What Would Happen With GEF (Alternative Scenario)

Project Strategy

82. Given the foregoing assessment of the situation confronting the NPAS, the project will adopt a three-pronged approach to the alleviation of the threats and barriers and to the strengthening of the system's effectiveness and sustainability.

83. The project will simultaneously support key interventions at the systemic level and at the PA level. At the systemic level, the project will enhance the enabling environment for the entire PA system through key interventions. At the PA level, the project will support key interventions for strengthening the management effectiveness of individual PAs. Several PAs will be selected on the basis of criteria as pilot sites for the development and testing of innovative approaches and mechanisms for the alleviation of key barriers at the PA level which will also provide the basis for up-scaling to the national level. The project will provide targeted interventions to put in place structures, capacities and tools that will lead to the sustainabilty of the NPAS, rather than focusing on several individual PAs. The third prong will provide for the compilation, dissemination and replication of lessons learned to other PAs in the national system. The project structure is illustrated in Annex 5.

84. The project goal is to help safeguard the globally significant biodiversity values of the Dominican Republic. The project objective is to enhance the sustainability and conservation effectiveness of the national PA system and its contribution to national sustainable development. This objective will be achieved through the realization of the following expected Outcomes and Outputs. The actual groupings of Outcomes will be examined and may be redesigned during the PDF B. It should also be borne in mind that the following proposed Outputs and Activities are presented as indicative ones, especially the Activities. Their exact nature will be defined in more detail during the PDF B.

Outcome 1: The enabling environment for the national protected area system is enhanced

85. The project will support the definition and undertaking of key strategic interventions that will serve to remove the barriers that currently constrain the effective management and development of the entire NPAS.

Output 1.1 NPAS Strategy is developed and its implementation is begun

86. The absence of a national system plan or strategy for the NPAS presents a big barrier to its effectiveness and future development. Aside from defining the PA development requirements at the national level, the strategy will also help guide the mainstreaming of PAs into development planning at the national level.

87. Indicative activities under the output include: (i) compilation of existing documentation on PAs and the system's development; (ii) extensive consultations with all relevant authorities and stakeholders in the definition of a PA vision for the country; (iii) compilation and mapping of existing information on biodiversity; (iv) national workshops on defining the principal elements of the strategy; (v) obtaining support from stakeholders for its implementation; (vi) endorsement of strategy and commencement of its implementation.

Output 1.2 NPAS Strategy and PA requirements are integrated into land, water and resource use planning processes and economic development plans

88. During its preparation and subsequent implementation, the NPAS will have to be very closely linked to national as well as local land, water and resource use planning processes and economic development plans. The project will support the definition of the most appropriate mechanisms for strengthening these linkages to ensure that PA objectives and management requirements are not compromised through these parallel processes but are rather reinforced and supported by them.

89. Indicative activities under this output include: (i) extensive consultations with relevant parties to ensure greater mutual understanding; (ii) establishment of a consultative mechanism and requirement to define the implications of development or land use plans to PAs prior to their approval.

Output 1.3 The legal, regulatory and policy framework for the NPAS is strengthened

90. The existing framework presents numerous constraints and barriers to the effective management and further development of the NPAS. This output will clearly articulate these constraints and barriers and will produce specific and realistic recommendations for required changes.

91. Indicative activities under this output include: (i) thorough analysis of the framework and the definition of required improvements (ii) preparation of recommendations for changes and the drafting of key enabling regulations; and (ii) support for the adoption of the recommendations through extensive consultations with government authorities.

Output 1.4 The organizational structure for the NPAS is revised

92. The existing NPAS organizational structure also presents numerous constraints and barriers to the effective management and further development of the NPAS. This output will clearly articulate these constraints and barriers and will produce specific and realistic recommendations for required changes.

93. Indicative activities under this output include: (i) thorough analysis of the organizational structure and its inherent constraints and the definition of required changes; (ii) preparation of recommendations for changes and (iii) support for the adoption of the recommendations through extensive consultations with government authorities.

Output 1.5 Financial and human resource management in the NPAS is strengthened

94. Currently highly centralized financial and human resource management within the NPAS is also seen as a barrier to effective management of the PAs. This prevents rapid responses to management needs at the PA level as situations may require. Also, the procedures employed are cumbersome and time consuming. The project will assess the specific implications of the employed procedures for financial management and staffing, and will support required changes in the procedures to make them more effective and efficient.

95. Indicative activities under this output include: (i) thorough analysis of the financial and human resource management procedures and their inherent barriers to effective and efficient management and the definition of required changes; (ii) preparation of recommendations for changes and (iii) support for the adoption of the recommendations through extensive consultations with government authorities.

Output 1.6 PA biodiversity information upgrading program is prepared

96. Presently, the information base on biodiversity in the PAs is deficient. It has gaps and is often outdated and not systematized. In the absence of comprehensive and reliable information, it is difficult to make proper decisions. To overcome this, the project will support the definition and standardization of information requirements in the NPAS by PA categories, and the design of a program for upgrading the information in the future. Standards for information management will also be developed.

97. Indicative activities under this output include: (i) definition of key biodiversity information requirements for PAs; (ii) design of a program for the upgrading of the information base; (iii) development of standards for information management and sharing among PAs.

Output 1.7 National PA training facility for PA managers and staff is established

98. Staff employed within the NPAS would benefit from the upgrading of the skill sets required for effective and efficient PA management. Many field personnel do possess the required skills and knowledge because most of the qualified personnel are employed in the main office. To overcome this gap in human resource capabilities, the project will support the establishment of a national PA training facility for PA managers and staff. It is envisaged that the project will assist in the setting up of the facility and the definition and initial offering of training, but that the operating costs would be born through a partnership arrangement between the government and other sectors.

99. Indicative activities under this output include: (i) definition of t raining requirements at all levels of the NPAS; (ii) assessment of options for t he facility's establishment and selection of most effective one; (iii) preparation of training materials; (iv) provision of training to PA staff; (v) definition and securing of long-term operating partnership arrangement for the facility.

Outcome 2: The management capacity of PAs is strengthened and their management effectiveness is increased

100. The project will demonstrate effective approaches to the removal of key barriers to the effective management of the PAs using pilot sites. Lessons learned from the development, testing and application of the interventions will be compiled and will provide a basis for strengthening the NPAS from the ground up and the further up-scaling of the lessons. The targeted interventions under Outcome 2 (as well as Outcomes 4 and 5) in selected demonstration sites will advance the management effectiveness at these sites but more importantly, from a system strengthening perspective, will provide for the testing of the innovative approaches and the development of best practices to overcoming barriers and improving of PA management that can be incorporated at the system level.

Output 2.1 Management Plans for critical PAs (to be defined during PDFB) are prepared and their implementation is begun

101. Management Plans will be prepared utilizing a broadly consultative process that will include the PA managers, representatives of other relevant government agencies, local government and communities, NGOs, and the private sector. These management plans will satisfy international standards.

102. Indicative activities under this output include: (i) consultations with stakeholders; (ii) preparation of plans; and (iii) endorsement of plans.

Output 2.2 Essential equipment and infrastructure is acquired for key PAs (to be defined during PDF B)

103. The project will assist in the provision of key technical support to enhance the management effectiveness of the PAs. For example, there is a great shortfall in facilities for rangers. This severely restricts their patrolling of PAs.

104. Indicative activities under this output include the acquisition of essential equipment and infrastructure for the selected PAs.

Output 2.3 PA operational capacity is increased in critical PAs (to be determined during PDF B)

105. Current staffing of the PAs has not been undertaken on the basis of current requirements. Thus, certain PA functions, such as community relations and environmental education, are not being performed at the level that they should be, if at all. Clearly, there is a need to redefine the organizational structures of the PAs and to rationalize the deployment of staff on the basis of the new structures and a thorough management needs assessment. This will foster the PAs' capacity to work with communities in a public awareness and public relations function, as well as increase the PAs' capacity to more effectively deal with enforcement issues, resource management, and conduct essential research and monitoring. Related to this is a need to upgrade the qualifications of staff. PA staff qualifications will be upgraded through the provision of mandatory training.

Training will focus on the development of higher skills in administration, natural resource management, public relations, environmental education, research, monitoring, surveillance, and legal aspects.

106. Also, and very importantly, there is a requirement to improve hiring standards and the accountability of staff for their performance. The institution of these changes through the project will provide benefits throughout the national PA system.

107. Indicative activities under this output include (i) definition of new organizational structures for the pilot PAs; (ii) preparation of job descriptions; (iii) rationalization of staffing requirements and redeployment of staff; (iv) development and delivery of training for PA staff on all aspects of PA management; and (v) implementation of job performance reviews against standards.

Output 2.4 Information on the selected PAs' biodiversity is improved through targeted research and monitoring programs (PAs to be selected during PDF B)

108. Information on the PAs' biodiversity is incomplete or outdated. This prevents the development and implementation of ecosystem-based and effective management programs. Thus, activities under this output will initially be geared towards addressing the gaps in key information, focusing on indicator species and rare and threatened ones as well. This will establish a baseline against which the effectiveness of PA management, and of the project, will be measured. Following the definition of the baseline conditions, the focus of activities will shift to the development and implementation of ecosystem based monitoring programs in the pilot PAs. The programs will be designed in a manner that will yield key information to managers and other decision-makers. A reporting mechanism will also be instituted. To enable the implementation of the monitoring and continuing biodiversity assessments, the project will support the establishment of permanent basic field monitoring stations and equipment. The project will also support activities geared towards improving the storage, management, and distribution of biodiversity information to decision-makers and the general public.

109. Indicative activities under this output include: (i) definition of key information requirements on basis of information gap analysis; (ii) upgrading of information through key inventories and targeted studies; (iii) development and implementation of monitoring programs.

Output 2.5 Innovative alternative financing mechanisms are developed and tested in pilot PAs of different categories (to be defined during PDF B)

110. The NPAS is severely under-financed and this has serious repercussions for management and ultimately for its effectiveness in conserving biodiversity. The prospects for additional funding from the government are not very positive. Thus, there is great need to develop innovative supplementary financing mechanisms to support the PAs. The current national PA legislation provides for the use of additional financing mechanisms but none have been developed to date. Thus, since need and opportunity coincide, the project will support the definition, design and testing of potential supplementary revenue generating mechanisms for the NPAS. It will do so at the level of pilot PAs of different categories so as to maximize the replication potential in the future.

111. Indicative activities under this output include: (i) definition of potential revenue generating options; (ii) consultations with potential partners; (iii) design of mechanisms; (iv) implementation and monitoring of mechanisms' effectiveness; (v) compilation of lessons learned for dissemination

Outcome 3: PAs are supported through innovative partnerships, and their planning and management involves stakeholders and provides benefits to local communities

Output 3.1 Models of co-management and other partnerships are developed and tested in pilot areas of different ecological and socio-economic characteristics (to be defined during PDF B).

112. Due to the financial constraints faced by the NPAS, management needs cannot be met strictly through the government's budgetary allocation to PAs. Thus, there is a need to develop alternative and innovative PA management models. These could take the form of co-management or some other form of partnerships between PAs and other parties. The project will support the examination of possible arrangements and the testing of some options on the basis of selected PAs. Particular attention will be devoted to the development of options that are conducive to enlisting local populations as partners. Partnershipos and co management will contribute to reduction of costs, since, in cases such as local governments, they do have their own budgets which can contribute to PA management. In fact, it would be both cost reduction and adding to the budget from other fianantial sources.This aspect is being analyzed withint the Policy Project. See Annex 4.

113. Indicative activities under this output include: (i) definition of potential partnership options and their essential requirements; (ii) design of options tailored to the specifics of the selected PAs; (iii) implementation of partnership and benefit sharing experiments and their monitoring and evaluation; and (v) dissemination of lessons learned for potential replication in other locations within the NPAS.

Output 3.2 Mechanisms for benefit sharing with local communities are developed and tested in pilot areas (to be defined during PDF B)

114. In the long term, local communities are most dependent upon the integrity of PAs for a number of reasons. These are related to the service and goods that PAs provide. However, they are also users, and at time abusers, of the PAs. Conservation actions will generally not be willingly undertaken by local communities, however, unless some direct benefits are derived from undertaking them. To promote this, the project will assist in the design and testing of potential mechanisms through which local communities may realize benefits accruing from the effective management of PAs and the conservation of their biodiversity. This will be done as pilot studies at the level of selected PAs. Successful experiences would be replicated elsewhere within the NPAS.

115. Indicative activities under this output include: (i) definition of potential benefit sharing mechanisms and their essential prerequisites; (ii) design of mechanism(s) tailored to the specifics of the selected PA contexts; (iii) implementation of mechanism(s) and their monitoring and evaluation; and (v) dissemination of lessons learned for potential replication in other locations within the NPAS.

Output 3.3 Mechanisms for the participatory involvement of local communities and other key stakeholders in PA planning and management are developed and tested in pilot areas (to be defined during PDF B)

116. Local communities are presently not involved in the planning and management of PAs. Unless they are meaningfully involved in decision-making, then conflicts between PAs and nearby populations will continue to increase and the opportunity to establish a fundamentally important partnership will be forgone. To overcome this barrier, the project will support the development and testing of innovative arrangements through which meaningful community involvement can be realized. This will be done at the level of selected PAs and lessons learned will be ransfered to other location within the NPAS.

117. Indicative activities under this output include: (i) definition of community involvement mechanism(s) options; (ii) development of mechanism(s); (iii) evaluation of effectiveness of mechanism(s); and (iv) dissemination of lessons learned to other location in NPAS.

Outcome 4: Awareness of and support for biodiversity conservation and PAs is increased among all stakeholders

118. Overall, awareness of the main issues related to the national PA system and biodiversity conservation is quite low in the country. Thus, the project will promote the raising of awareness of the NPAS and biodiversity and support for its conservation among all stakeholders. Biodiversity awareness raising opportunities will be provided to employees of relevant government departments and agencies, PA staff, local communities, and to the private sector, including travel agencies and tour operators. Since general knowledge of the environmental legal

framework and of legal liability for illegal activities and other related violations is also quite poor, the project will also support measures for raising public awareness of environmental legal issues.

119. Particular emphasis will be given to the provision of information to residents near PAs and resource users. Information materials on the global and national significance of the Dominican biodiversity and the role of the PA system in its conservation will be developed and distributed.

Output 4.1 Project Communications Strategy is developed and implemented

120. A project Communications Strategy intended to publicize the project and its objectives and to build up a constituency among stakeholders will be developed and implemented at the start of the project. The strategy will include specific content targeted at individual sectors such as farmers and livestock raisers, forestry, mining, construction and tourism. Since the strategy will also greatly involve the mass media in the country, specific work will also be undertaken with representatives of the media to sensitize them to the project's objectives and to the national PAs and biodiversity conservation in general. The strategy will also incorporate using the PAs as particularly important vehicles for the delivery of messages on biodiversity conservation.

121. Indicative activities under this output include: (i) development of the project Communications Strategy; (ii) creation of a project web site; (iii) publication and distribution of project materials to stakeholders (project newsletter); and (iv) monitoring and adaptation of the project Communications Strategy as required.

Output 4.2 Awareness raising program on biodiversity and PAs is developed and implemented

122. The project will support the preparation of materials on the NPAS and biodiversity conservation issues as well as the organization and delivery of training on biodiversity conservation and sustainable use of resources to land and resource users and decision-makers. Likewise, the project will help pilot PAs develop and deliver biodiversity awareness programs to local communities and resource users.

123. Indicative activities under this output include: (i) definition of audience by sectors and their specific information needs; (ii) development of the awareness raising program on the basis of the information needs assessment; (iii) preparation of awareness raising documentation and other materials; and (iv) delivery of the program using various methods (radio, TV, print media, CDs).

Outcome 5: Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond

124. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition, the project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for personnel working on projects that share common characteristics. UNDP/GEF shall establish a number of networks, such as Integrated Ecosystem Management, eco-tourism, co-management, etc, that will largely function on the basis of an electronic platform. 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 future project implementation through lessons learned.

125. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identifying and analyzing lessons learned is an on-going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. To this end, a percentage of project resources are allocated for these activities.

Output 5.1 M&E and adaptive management applied to project in response to needs and to extract lessons

126. The project's effectiveness will be monitored and evaluated throughout its course against set performance indicators. Adaptive management will be employed to provide a basis for learning lessons and adjusting the project to maximize its effectiveness.

127. Indicative activities under this output include: (i) on-going assessment and evaluation of the project's effectiveness, adaptive management, and compilation of lessons learned and best practices; and (ii) on-going dissemination of lessons learned and best practices using a variety of techniques and knowledge networks

Output 5.2 Lessons learned and best practices are disseminated nationally using the national PA management training facility

128. The ultimate objective is to ensure that the project's lessons and best practices will be replicated in other PAs in the country so as to strengthen and sustain the national system of protected areas. To facilitate the dissemination and replication of best practices and lessons learned, the national training facility for PA managers and staff will be used. This will make a significant contribution towards the strengthening of management throughout the entire national PA system. The costs of operating the facility after the project will be borne by the government.

129. Indicative activities under this output include: (i) national scale training of PA administrators and staff on basis of project's lessons and best practices, as well as international experience; (ii) institution of the application of the WB/WWF PA Management Effectiveness Tracking Tool application in all national PAs.

Output 5.3 Project's best practices are replicated in three pilot areas (del Est National Park, Armando Bermudez National Park/ Carmen Ramírez and the Jaragua-Bahoruco-Enriquillo Biosphere Reserve)

130. To capitalize quickly on the lessons learned from the project, replication of some of its most relevant elements will be undertaken in the above three important protected areas in the country.

131. Indicative activities under this output include: (i) replication of the project's lessons and best practices in these three areas before the completion of the project

Output 5.4 Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge sharing networks.

132. To facilitate the dissemination and replication of best practices and lessons learned further, they will be spread throughout the Caribbean region and globally using publications, the Internet, regional and international PA forums, and established knowledge dissemination networks, including those of the UNDP.

133. Indicative activities under this output include: (i) preparation of publications and their distribution; (ii) updating of the project website; (iii) preparation of papers and participation in regional and international forums.

3. Sustainability (including financial sustainability)

134. Essentially all of the Outcomes and Outputs of the project are designed so as to ensure the sustainability of the NPAS. The sustainability of the NPAS implies sustainability of the project's results. Among factors that will ensure that the project's benefits will continue beyond the project's timeline, thereby making the project's outcomes sustainable, are the following.

135. The rationalization of the existing NPAS to make it more effective in terms of biodiversity conservation, and the eventual provision of PA status to new areas that are important for biodiversity conservation but are currently not protected as a result of the preparation of the NPAS strategy through the project, will ensure the

ecological sustainability of the project's results from the perspective of conserving globally important species in the Dominican Republic.

136. From an institutional perspective, the project simultaneously promotes capacity building at the systemic, PA and individual stakeholder levels, and facilitates the establishment of partnerships and enhanced collaboration among them. The multi-stakeholder approach utilized in its preparation and subsequent implementation, along with the emphasis on the development of strengthened management capacity of all parties to the project, will likewise promote its institutional sustainability. This strengthened capacity, in the form of improved legislation, information, coordinating mechanisms and other aspects of management, financial and human resource management, improved skills, and heightened awareness of biodiversity and PAs and support for biodiversity conservation will be sustainable by its nature following the project's completion.

137. Social sustainability will be ensured primarily through the development of strong ties between the PAs and local communities. The development and implementation of mechanisms for the sharing of economic and other benefits with local populations and the provision of opportunities for direct local involvement in PA operations and planning will also bridge the current gap between the local populations and the PAs. Their relationship will be one that can be characterized as a partnership.

138. Financial sustainability of the project's results will be ensured through the capacity building nature of most of the project's initiatives, as well as certain project activities. For most of the activities, there will be no recurrent costs. These will be one time costs. In this regard, the project will be a true catalyst in strengthening the NAPS. Certain activities, such as the development and refinement of innovative supplementary financing mechanisms and the development of partnerships in support of PAs, will also help offset current PA financial difficulties.

4. Replicability

139. The project targets the strengthening of the entire NPAS of the Dominican Republic. Thus, ensuring the replicability of the project's results is of paramount importance. To accomplish this, the project's design incorporates several key elements to ensure the replicability of its results throughout the NPAS. First, the project incorporates the development and utilization of a project Communication Strategy that, in part, will be used to disseminate experiences and knowledge gained in the course of the project's implementation. The strategy will be designed in a manner that will target specific messages and information to identified principal target groups to ensure that information is of greatest immediate value and specific direct benefit to them. Secondly, the project will assist in the establishment of a national PA training facility. Training in best practices of PA management, including context sensitive training based on the project's best practices and lessons learned, will be provided to PA administrators and staff at the national level. The national PA management training facility will greatly assist in providing the basis for the dissemination and replication of the project's results in other locations. The project design also includes the replication of some of the project's best practices in 3 PAs prior to the completion of the project. Similarly, most of the Outputs under Outcome 2 are designed for replication in other parts of the NPAS.

140. The following project elements stand out as being most amenable to replication elsewhere in the NPAS system:

- Preparation of PA management plans tot international standards
- Creation of effective and efficient appropriate PA organizational management structures
- Monitoring program development and information management
- Establishment of mechanisms for engaging community involvement in PA planning and management
- Establishment of mechanisms for benefit sharing with local communities
- Innovative supplementary financing mechanisms
- Utilization of partnerships in PA management
- Standardizing recruitment procedures, job descriptions and performance appraisal reviews for PA staff
- Management Effectiveness Tracking Tool application in all PAs in the country

In addition, legislative reforms to be promoted through the project will legally require the subsequent adoption and thus replication of selected approaches to the management of national PAs throughout the country.

5. Stakeholder Involvement

141. Throughout the PDF A phase, much effort was devoted to developing and maintaining close contacts with stakeholders. All government stakeholders were directly involved during the PDF A, as were NGOs, research institutions, and PA administrators. Numerous consultations occurred with all of the above stakeholders, taking the form of discussions and workshops. Two key and well-attended workshops in which all of the above parties were represented and actively participated were also organized where consensus on the key elements of the project was obtained. The project will continue to broaden and strengthen stakeholder participation during the PDF B phase and during the project's implementation. One focus will be on ensuring the direct participation of and strengthened dialogue with various stakeholders, especially local communities and the private sector.

142. Extensive and effective mechanisms for stakeholder participation will continue to be utilized during the PDF B phase and the project's implementation. GEF funds will help facilitate the broadening of participation, and the sharing and exchanging of experiences and lessons learned among all stakeholders.

D. FINANCIAL MODALITY AND COST EFFECTIVENESS

1. Financial Plan

143. On the basis of the indicative Outcomes and Outputs described above, initial calculations suggest that GEF funding in the order of US$ 7-8 million will be sought. The magnitude of the request is related to the size of the current NPAS, recognizing the major deficiencies in terms of management planning and financial management, and especially due to the need to address a major gap in the NPAS through the establishment of marine protected areas.

144. A ratio of co-financing amounts relative to GEF funds of close to 3:1 is anticipated. The major sources of co-financing are expected to include:

- The Government of the Dominican Republic, which will provide cash and in-kind support
- UNDP, through cash and its continuing support for improvements in environmental governance and capacity building among relevant civil society organizations.
- Other donors that will be identified during the project's development.

Cost Effectiveness

145. A biodiversity project is considered to be effective if it protects natural assets such as habitats and species, thereby reducing the risk of biodiversity loss (e.g. through the protection of endangered or globally significant species, and the protection of unique habitats or ecoregions[6]. This project does so on all counts – species, habitats and the conservation of a globally significant ecoregion. Since a biodiversity project's effectiveness corresponds to its reduction of risks to biodiversity, the project likewise focuses upon the protection of important habitats, the protection of species richness, and the protection of intra-species genetic diversity.

146. The project is also designed so as to achieve the required outcomes and outputs while only incurring necessary incremental expenses. To accomplish this, the project will utilize co-financing, parallel financing, existing national and local capacities, as well as infrastructure as much as possible, and will assist in building them up. The project will also contribute to the on-going government efforts to improve and strengthen the national PA system. Thus, costs to be incurred will be only for those additional actions required to provide key

[6] Biodiversity and Evaluation of Cost Effectiveness. Internal UNDP/GEF paper. September 2005.

incremental assistance to the government in undertaking reforms in order to markedly improve the sustainability and conservation effectiveness of the national protected area system. The project will adopt an approach that will focus on the building of partnerships, including public-private partnerships. It will also identify current inefficiencies in the NPAS's administration and will strive to adopt innovative and more cost effective structures and procedures. The project will also develop innovative supplementary financing mechanisms for the PAs.

147. The stakeholder participation plan will provide a basis for establishing strong links not only to other GEF co-financed initiatives, but also to other relevant national and regional initiatives supported by other organizations, including other donors, and national and international NGOs. This will ensure that the proposed project will maximize the synergy with these other initiatives.

E. INSTITUTIONAL COORDINATION AND SUPPORT

2. Core Commitments and Linkages

148. Since the early 1990s, the Dominican Republic's UNDP Office has considered environmental issues, as agreed upon with the Dominican Government and other members of civil society, as a priority in its Country Programs. UNDP support was provided to reform the environmental legal and institutional framework, which resulted in the adoption of the General Environmental Framework Law or Law 64 – 00 and the creation of the Ministry of Environment in 2000. UNDP continues to support the environmental sector of the country. The UNDP/GEF/SGP was established from the beginning, and now, with more than ten years of existence, is recognized globally. UNDP support is also supporting the implementation of MEAs. The national UNDAF, which is about to be finished, also places high importance on environmental issues. In line with its on-going commitment to improving the environment of the country, the UNDP will continue to provide essential support for the development and implementation of this project.

2. Consultation, Coordination and Collaboration between and among Implementing Agencies, Executing Agencies, and the GEF Secretariat, if appropriate.

149. General coordination occurs already through two different ways. First, it is through the SEMARN Planning Office, which coordinates projects to be implemented through SEMARN. Secondly, the environmental donors table meets regularly to coordinate support actions in the country. The latter has in fact supported the PDF A workshops for the preparation of this proposal. A Project Steering Committee for the formulation phase already exists. Its membership will be broadened during the PDF B implementation. UNDP will offer support and coordination with the SGP and with other projects in LAC.

3. Implementation/Execution Arrangements (for the PDF B)

150. The Government of the Dominican Republic will execute the project under the UNDP National Execution (NEX) modality. In its capacity as Executing Agency, the State Secretariat for Environment and Natural Resources will be responsible for directing the project, attaining the project's objective and expected outcomes and outputs, making effective and efficient use of the resources allocated for the PDF B, and ensuring effective coordination between the project and the other relevant projects in the country dealing with strengthening of the national protected areas system.

151. For the PDF B, a Project Steering Committee (PSC), comprised of representatives of SEMARN (SABP/SINAP), Consorcio Ambiental Dominicano (CAD) and UNDP, will be established to undertake the following tasks:
:

- Select the PDF B team for the formulation of the FSP.
- Evaluate the project preparation team's progress and undertake necessary measures to guarantee the delivery of the expected products within the agreed upon timeframe.

- Meet at least two times during the PDF B phase.

The Advisory Committee that was established for the PDF A, and comprised of representatives of government (SABP/SINAP), NGOs (CAD), UNDP, and national consultants, will continue to function as a key body for the preparation of the full-size project.

152. For the PDF B phase, participation in project design will broaden significantly by including representatives from additional sectors, including community and religious leaders, scientists, the private sector and decision-makers from other relevant government Ministries.

153. The PDF-B team will be located in SEMARN and will be responsible for the day-to-day implementation of all project activities, including the direct supervision of the activities that will be contracted to consultants. This unit will be headed up by a Project Manager. An international consultant will provide technical support to the Project Manager and project preparation team during key stages of the PDF B and will prepare the full size Project Brief and Project Document and Executive Summary.

154. The PDF-B team will work under the direct supervision of a Project Director, who will be a senior staff member of SEMARN, who will spend a sufficient amount of time on the project and report to the Project Steering Committee.

155. UNDP will be ultimately accountable to GEF for the project's delivery and responsible for supervising project development, guiding PDF activities and contracting staff if requested by SEMARN.

4. Lessons learned from other projects

156. The Dominican Republic has a broad set of experiences related to protected area management. It dates back to 1974, when the modern government office for PAs was established. and more recently, with the development of national NGOs and CBOs working in or with the PAs. Main lessons have come from: a GEF sponsored project (DOM/92/G31) Conservation and Management of the Coastal Zone in the Dominican Republic; the Helvetas/DED Dominican Environmental Conservation Program (1993 to 2002); Spanish Cooperation support provided to National Park of the East; and the USAID/TNC supported Parks in Peril project. All of these initiatives, and some others, have resulted in a broad array of experiences and lessons, which at present are not well systematized. Their lessons will be distilled further during the PDF B and will be incorporated into the design of the full size project

157. The UNDP/GEF/SGP has been very successful in the Dominican Republic, working with small environmental projects and local communities and NGOs, and lessons from the program will also be incorporated into the full size project's design. The most important source for experiences and lessons learned from around the world, and in particular the Latin American and Caribbean Region, is from GEF projects. Central America and Cuba also have important GEF experiences that will be looked at for the incorporation lessons learned in those projects.

158. Perhaps the two key immediately relevant lessons learned from the above projects is that it is essential to involve all stakeholders and to strive for a truly participatory process, and to keep the project design and implementation process flexible and lines of communication open.

PART II - Project Development Preparation

A - Description of Proposed PDF Activities

1. The requested PDF B will be implemented over a period of approximately 10 months. The PDF B grant will support the detailed design of the FSP in a participatory manner, the preparation of ancillary documentation for submission to GEF, and will also support initial awareness and stakeholder involvement building activities to facilitate the implementation of the Full Size Project. The PDF B will achieve three main Outcomes:

    - Outcome 1: Barriers to the national PA system's effectiveness and sustainabilty will be further defined and analysed with the participation of key stakeholders
    - Outcome 2: Threats to PA biodiversity and barriers to PA management effectiveness at the site level will be further defined and analysed
    - Outcome 3: The Full Size project brief and subsequently the Project Document and Executive Summary will be prepared, endorsed by government and other stakeholders, and submitted with all required documentation for approval to GEF

1. These outcomes will be achieved through the following Outputs and indicative Activities.

Outcome 1: Barriers to the national PA system's effectiveness and sustainabilty will be defined and analysed with the participation of key stakeholders

Output 1.1 The PA legal, regulatory and policy framework in relation to the PA system is analysed and barriers defined (further definition of specific deficiencies and of opportunities for improvement)

The current national legal, regulatory and policy framework that is relevant to PAs and biodiversity conservation must be analysed in order to more precisely define and focus the project's interventions in this area. The focus will be on the identification of deficiencies, perverse incentives, and aspects of sectoral policies and procedures followed by different agencies that increase pressure on protected areas and biodiversity and hinder the integration of PAs into national development panning processes.

Indicative Activities:
1.1.1 Detailed analysis of PA Law 202-04
1.1.2 Policy and legislation matrix preparation
1.1.3 Definition of legislative, regulatory and policy deficiencies, gaps, inconsistencies and requirements for change and appraisal of opportunities to promote change
1.1.4 Workshops with Ministers, private sector leaders, religious leaders and legislators to foster change
1.1.5 Establishment of consultation mechanism with relevant stakeholders

Output 1.2 The effects of the current centralized organizational structure and administrative procedures are analysed (further definition of specific constraints to effective management and opportunities for improvement)

While the constraints imposed by the current structure and procedures are generally known, it is necessary to examine them in more detail and to ddefine potential alternatives that are more effective and efficient.

Indicative Activities:
1.2.1 Definition of centralized structure's effects (financial management, staffing, decision-making)
1.2.2 Assessment of the viability of a decentralized model for management of the NSPA financing

Output 1.3 The standards of PA operational needs in different contexts are determined, the current NPAS funding gap is analysed, and supplementary funding options are explored and defined for further study during the FSP

Indicative Activities:

1.3.1 Definition of operational needs and costs for different PAs in different contexts
1.3.2 Definition of current funding levels and sources and current gap
1.3.3 Definition of feasible supplementary funding options for further study

Output 1.4 The PA system's linkages to land and resource use sectors are analysed (further definition of specific deficiencies and of opportunities for improving linkages)

It is necessary to gain a deeper understanding of the land use and economic development planning context in which the NPAS operates at the national level so as to identify potential points for improving thelinkage.

Indicative Activities:
1.4.1 Establish baseline concerning land use and economic development plans
1.4.2 Definition of existing incentives driving land use change and resource use and their reflection on PA system development and sustainability
1.4.3 Consultations with private sector and other key stakeholders

Output 1.5 PA coverage in relation to important habitats and biodiversity is analysed (definition of deficiencies and identification of needs)

One glaring existing deficiency is the absence of reliable information on the relationship between important habitats and the distribution of biodiversity in the country and the extent of their coverage by the current NPAS. This information is of fundamental importance for the preapration of a NPAS strategy and the future development of the NPAS.

Indicative Activities:
1.5.1 Conduct of a status assessment of existing protected area coverage to identify important habitats and species currently not represented (including in coastal and marine ecosystems)
1.5.2 Elaboration of technical criteria for including sites in the NSPA and the identification of potential areas and corridor possibilities for integration into the NPAS using the criteria
1.5.3 Preparation of maps of gaps in coverage and identification of potential corridors

Output 1.6 PA biodiversity values are defined and analysed

An appraisal is required of the reasons for the establishment of all PAs in the NPAS. This is to be accompanied by a compilation of known biodiversity values for the PAs.

Indicative Activities:
1.6.1 Compilation of information on the rationale for the establishment of the existing PAs and their values, and the definition of required future studies to be undertaken during the FSP

Output 1.7 Current PA classification is analysed and rationalized in relation to international categories

Within the NPAS, there is inconsistency in the classification of PAs. This has negative implications for their management. All PAs in the national system will be reviewed to eliminate this problem.

Indicative Activities:
1.7.1 Establishment of criteria for the re-classification of existing PAs according to international standards and their application to existing PAs in the system
1.7.2 Workshop for validation of criteria and re-classification of PAs in accordance with international standards

Outcome 2: Threats to PA biodiversity and barriers to PA management effectiveness at the site level are defined and analysed

Output 2.1 Pilot areas for the full size project are selected and key baselines are defined

Since the project cannot work in all 86 PAs of the national ystem, several PAs will be selectedon the basis of criteria to be developed for the development nd testing of innovative approaches and mechanisms forthe resolution of key issues and the removal of barrier to their effective management.

Indicative Activities:
2.1.1 Development of PA selection criteria
2.1.2 Application of criteria and selection of pilot sites with the participation of stakeholders
2.1.3 Definition of key baseline values for project sites in relation to indicators to be used in assessing project impact

Output 2.2 On site threats to biodiversity and barriers are thoroughly defined and analysed

The selected PAs will be subjected to a more detailed compilation of key information and its analysis so as to formulate the most effective intervention strategy at the PA level.

Indicative Activities:
2.2.1 Definition and assesment of information deficiencies, including key biodiversity data and information management systems (protocols for access, sharing, updating, standards etc.)
2.2.2 Analysis of existing administrative arrangements at PA level (structure, personnel deployment, staffing procedures etc.)
2.2.3 Assessment of the structure's influence on PA management effectiveness
2.2.4 Assesment of technical-material base adequacy (equipment, infrastructure)
2.2.5 Analysis of staff capacity (skills, training)
2.2.6 Appraisal of current relations of selected PAs with local populations and definition of potential mechanisms for increasing participation

Output 2.3 Baseline METT scores for pilot PAs are established

Baseline METT scores for the selected PAs will be established.

Indicative Activities:
2.3.1 Application of WB/WWF METT to pilot areas to establish baseline score

Outcome 3: Full Size project brief and project document are prepared, endorsed by government and other stakeholders, and submitted with all required documentation for approval to GEF

Output 3.1 Project development consultations and workshops are held and partnerships with stakeholders are established.

Participation of all stakeholders will continue to be a central feature of the project. During the PDF B, stakeholder will be defined and partnerships established for the implementation of the full size project. A series of workshops and other forms of consultation with stakeholders will be held to ensure consensus over the project's elements and also ownership of the project among all stakeholder groups. The workshops will include:

- A PDF B launch workshop for stakeholders to familiarize them with the project and its objective and expected Outcomes and Outputs and timeframe, and to commence the building up of partnerships in support of the project.
- A workshop with representatives of key stakeholder groups to refine the key barriers that impede the effective management of the NPAS. Work done under Outputs 1 and 2 will provide the basis for this workshop.

- Workshops and working sessions with representatives of key stakeholder groups to define the logical framework for the project, identify assumptions underlying the project and define a clear strategy for mitigating risks to Outcomes. In these workshops, indicators for the measurement of project impact would also be confirmed.

Indicative Activities:
3.1.1 Stakeholder analysis and definition of roles and responsibilities
3.1.2 Workshops and consultations with stakeholders to develop consensus on project elements

Output 3.2 Co-financing is secured

SEMARN and the project development team will identify prospective donors through both formal and informal activities during the PDF B phase and will negotiate with them to confirm their co-financing commitments.

Indicative Activities:
3.2.1 Definition of potential sources and amounts for co-financing and securing of commitments

Output 3.3 Project implementation structure is defined and agreed upon

The most effective and cost efficient project implementation structure qwill be devised on the basis of mandates and capacities to undertake the implementation of the full size project. This structure will be endorsed by stakeholders.

Indicative Activities:
3.3.1 Consultations wth key stakeholders and the definition of and agreement upon project implementation arrangements

Output 3.4 Project Brief and Project Document with all necessary Annexes and Executive Summary are prepared

The preparation of the required documentation will adhere to established templates. The Project Brief will include a detailed description of threats, root causes and barriers, defined and agreed upon project Outcomes and Outputs and their sequencing, the project Logical Framework with indicators at the Objective and Outcome levels and their baseline values and targets, the Incremental Cost Assessment, the Stakeholder Assessment and Public Participation Plan, and the M&E Plan. Once endorsed by the national government, the project documentation will be circulated to STAP, other Implementing Agencies, the GEF Secretariat and the Secretariat of the CBD for appraisal, and comments received from these reviewers and the Executive Council will be addressed in finalizing the document for final approval and financial delegation by the GEF. The Documentation will consist of the following:

(i) Executive Summary

(ii) Mandatory Annexes:
   a. Incremental Cost Assessment
   b. Logical Framework Matrix
   c. Endorsement Letter and Co-funding commitments

(iii) Additional Annexes
   a. Threats and Barrier Analysis
   b. Baseline Assessment
   c. Public Participation Plan and Stakeholder Assessment
   d. Monitoring and Evaluation Plan

Indicative Activities:
3.4.1 Preparation of project brief and its submittal for review and endorsement
3.4.2 Preparation of Project Document and Executive Summary and their submittal for endorsement

B - PDF Block B (or C) Outputs

The principal output of the PDF B will be the GEF Executive Summary and Project Document, which will be supported by all required Annexes, including a detailed Threats and Barriers analysis, the M&E Plan, the Stakeholder Analysis and Public Participation Plan, the Incremental Cost Analysis, the Cost Effectiveness Assessment, and the project Logical Framework. In addition, PDF activities will produce strengthened institutional arrangements, established mechanisms to be used for further consultation and coordination during the project's implementation, and refined methodologies for maximizing local participation and consensus building.

C – Justification

Although a considerable amount of work has already been undertaken and information collected during the PDF A, significant gaps in information still remain and thus further investigation and actions are necessary to further refine the project's components and also to obtain the necessary consensus from all relevant stakeholders. PDF B funding is requested to undertake these essential activities and consultations with stakeholders in the further design of the project.

D – Timetable

PDF B Activities	**Months**									
	1	2	3	4	5	6	7	8	9	10
Recruitment of PDF team and establishment of PSC and Project Office										
Outcome 1: Barriers to the national PA system's effectiveness and sustainabilty are defined and analysed with the participation of key stakeholders										
Output 1.1 The PA legal, regulatory and policy framework in relation to the PA system is analysed and barriers defined (further definition of specific eficiencies and of need and opportunities for improvement)										
Output 1.2 The effects of the current centralized organizational structure and administrative procedures are analysed (further definition of specific constraints to effective management and opportunities for improvement)										
Output 1.3 The standards of PA operational needs in different contexts are determined, the current NPAS funding gap is analysed, and supplementary funding options are explored and defined for further study during the FSP										
Output 1.4 The PA system's linkages to land and resource use sectors are analysed (further definition of specific deficiencies and of opportunities for improving linkages)										
Output 1.5 PA coverage in relation to important habitats and biodiversity is analysed (definition of deficiencies and identification of needs)										
Output 1.6 PA biodiversity values are defined and analysed										
Output 1.7 Current PA classification is analysed and rationalized in relation to international categories										
Outcome 2:Threats to PA biodiversity and barriers to PA management effectiveness at the site level are defined and analysed										
Output 2.1 Pilot areas for the full size project are selected and key baselines are defined										
Output 2.2 On site threats to biodiversityand barriers are thoroughly defined and analysed										
Output 2.3 Baseline METT scores for pilot PAs are established										
Outcome 3: Full Size project brief and project document are prepared, endorsed by government and other stakeholders, and submitted with all required documentation for approval to GEF										
Output 3.1 Project development consultations and workshops are held and partnerships with stakeholders are established										
Output 3.2 Co-financing is secured through consultations with stakeholders and potential donors										
Output 3.3 Project implementation structure is defined and agreed upon										
Output 3.4 Project brief and Project Document with all necessary Annexes and										

Executive Summary are prepared										

E – Budget

PDF B Budget by Outcomes and Outputs	GEF ($ US)
OUTCOME 1: Barriers to the national PA system's effectiveness and sustainabilty are defined and analysed with the participation of key stakeholders	
1.1 The PA legal, regulatory and policy framework in relation to the PA system is analysed and barriers defined (further definition of specific deficiencies and of needs and opportunities for improvement)	21,000
1.2 The effects of the current centralized organizational structure and administrative procedures are analysed (furtrher definition of specific constraints to effective management and opportunities for improvement)	17,000
1.3 The standards of PA operational needs in different contexts are determined, the current NPAS funding gap is analysed, and supplementary funding options are explored and defined for further study during the FSP	19,000
1.4 The PA system's linkages to land and resource use sectors are analysed (further definition of specific deficiencies and of opportunities for improving linkages)	20,000
1.5 PA coverage in relation to important habitats and biodiversity is analysed (definition of deficiencies and identification of needs)	24,000
1.6 PA biodiversity values are defined and analysed	19,000
1.7 Current PA classification is analysed and rationalized in relation to international categories	7,000
Sub-total	**127,000**
Outcome 2 Threats to PA biodiversity and barriers to PA management effectiveness at the site level are defined and analysed	
2.1 Pilot areas for the full size project are selected and key baselines are defined	23,000
2.2 On site threats to biodiversityand barriers are thoroughly defined and analysed	75,000
2.3 Baseline METT scores for pilot PAs are established	14,000
Sub-total	**112,000**
Outcome 3 Full Size project brief and project document are prepared, endorsed by government and other stakeholders, and submitted with all required documentation for approval to GEF	
3.1 Project development consultations and workshops are held and partnerships with stakeholders are established	65,000
3.2 Co-financing is secured through consultations with stakeholders and potential donors	7,000
3.3 Project implementation structure is defined and agreed upon	5,000
3.4 Project brief and Project Document with all necessary Annexes and Executive Summary are prepared	30,000
Sub-total	**107,000**
Grand Total: US$	**346,000**

Co-financing Sources				
Name of Co-financier (source)	**Classification**	**Type**	**Amount (US$)**	**Status**
UNDP	IA	In kind	14,000	Committed
GTZ	Bilateral	In cash and in kind	30,000	Committed
USAID	Bilateral	In cash and in kind	80,000	Committed
AECI	Bilateral	In cash and in kind	10,000	Committed
TNC	NGO	In cash and in kind	70,000	Committed
Helvetas	NGO	In cash	10,000	Committed
CAD	NGO	In cash and in kind	15,000	Committed
SEMARN	Government	In kind	8,000	Committed
Sub-Total Co-financing			**238,000**	

Part IV – Response to Reviews

Convention Secretariat

Implementing Agencies

Executing Agencies

GEF Secretariat

LIST OF ANNEXES

Annex 1 **Letter of Government Endorsement**

Annex 2 **List of National Protected Areas**

No.	Protected Areas/Categoríes	Physical Terrestrial Size (km^2)	Marine Surface (km^2)	Total (km^2)	Date of establishment	Principal ecosystems represented / species protected
	I. STRICTLY PROTECTED AREAS					
	Total Area Under Strict Protection	**199.28**	**66,677.89**	**66,877.18**		
	% of National Area	**0.41**				
	A. Scientific Reserves					
1	Villa Elisa	0.23		0.23	6/April/1976	Dry Forest, Endemic orchíds
2	Ebano Verde (Green Ebony)	23.10		23.10	26/October/1989	Humid forest and rainforest, main population of green ebony verde (*Magnolia palescens)*, endemic species of valuable wood
3	Loma Quita Espuela	72.50		72.50	16/December/1992	Cloud Forest and pluvious forest
4	Loma Barbacoa	22.00		22.00	3/July/1996	Cloud Forest and Very Humid Forest
5	Loma Guaconejo	23.45		23.45	3/July/1996	Cloud Forest, Pluvious Forest and Very Humid Forest
6	Las Neblinas	36.00		36.00	3/July/1996	Cloud and Pluvious Forest .
	Total	**177.28**	**0.00**	**177.28**		
	% of National Area	**0.37**				
	B. Marine Mammal Sanctuaries					
7	Bancos de la Plata y de la Navidad		66,670.00	66,670.00	1986	Marine Area, Marine pastures, Coral reefs, habitat for reproduction of wheal jorobada *(Megaptera novaengliae)* and marine species of commercial fishing interest

8	Estero Hondo	22.00	7.89	29.89	30-Jul-04	Coastal-Marine Area refuge for manatee (*Trichechus manatus manatus*) and other species. Mangroves and marine pastures.
	Total	**22.00**	**66,677.89**	**66,699.89**		
	% of National Area	**0.05**				
	II. NATIONAL PARKS					
	Total area in National Parks	**7,931.19**	**641.36**	**8,572.55**		
	% of National Area	**16.46**				
	A. National Parks					
9	Armando Bermúdez	779.00		779.00	19/February/1956	Very humid Forest, Low wet montain, Conifer forest.
10	José del Carmen Ramírez	775.22		775.22	24/December/1958	Very humid forest, low mountain and wet low mountain, and pluvial low, conifer forest.
11	Nalga de Maco	278.00		278.00	30/September/1995	Humid forest.
12	Montaña La Humeadora	290.00		290.00	3/July/1996	Humid forest
13	Lago Enriquillo e Isla Cabritos	412.00		412.00	3/July/1996	Dry forest, mangroves, Important international wetland, Ramsar site.
14	Valle Nuevo	910.00		910.00	11/August/1983	Humid forest, very humid and pluvious low mountain, pine forest, palm forest.
15	Sierra Martín García	268.00	16.15	284.15	3/July/1996	Dry forest, semi-humid, low mountain humid.
16	Sierra de Bahoruco	1,126.00		1,126.00	11/August/1983	Very humid forest, low mountain, Wet and dry, pluvial and dry, pine forest.
17	Cabo Cabrón	35.87		35.87	3/July/1996	Coastal forest, coastal wall forest.
18	Sierra de Neiba	278.00		278.00	30/September/1995	Cloud forest, humid and pine forest.

19	Los Haitises	600.82		600.82	10/January/1968	Very wet forest and humid, Karst topography. Many caves with cultural values, mangroves.
20	El Morro	19.30		19.30	30/July/2004	Dry forest, coastal-marine habitat of migratory species, very particular topography scenic value.
21	Del Este	368.13	423.77	791.90	16/September/1975	Humid forest and dry, coastal lagoons, mangroves, marine pastures. Caves with cultural values.
22	Jaragua	1,543.00		1,543.00	26/February/1986	Dry forest, coastal lagoons, mangroves, reefs, marine pastures, fish species of commercial importance, marine turtles.
23	Manglares del Estero Balsa	81.00	8.67	89.67	30/July/2004	Mangroves
24	Manglares del Bajo Yuna	110.00		110.00	3/Julio/1996	Coastal wetland, greatest surface of mangroves in the region.
25	Ozama Wetlands	47.42		47.42	30/July/2004	Wetlands
	Total	**7,921.76**	**448.60**	**8,370.36**		
	% of National Area	**16.44**				
	B. National Marine Parks					
26	Monte Cristi	8.29	183.44	191.73	30/July/2004	Coral reefs, marine pastures.
27	La Caleta	1.14	9.32	10.46	25/September/1986	Coral reefs
	Total	**9.43**	**192.76**	**202.20**		
	% of National Area	**0.02**				
	III. NATURAL MONUMENTS					
	Total Area of Natural Monuments	**449.57**	**221.76**	**947.72**		
	% of National Area	**0.93**				
	A. Natural Monuments					

28	Cabo Francés Viejo	1.50		1.50	2/May/1974	Humid forest
29	Salto El Limón	16.00		16.00	3/July/1996	Very humid forest, natural waterfall (casquede)
30	Las Dunas de las Calderas	20.00		20.00	3/July/1996	Dry forest, dunes, mangroves
31	Las Caobas	73.00		73.00	30/September/1995	Humid forest.
32	Isla Catalina	9.09	9.14	18.24	31/December/1995	Dry forest, temporary lagoons, and salty areas covered by halophyte species. Coral reefs.
33	Lagunas Cabarete y Goleta	77.50		77.50	31/December/1995	Humid forest and rain forest, coastal lagoons and mangroves.
34	Loma Isabel de Torres	15.00		15.00	3/July/1996	Humid forest, cloud forest.
35	Pico Diego de Ocampo	28.03		28.03	1/July/1996	Humid forest, Wetlands, manaclares (palm) .
36	Río Cumayasa y Cuevas Las Maravillas	88.50		88.50	3/July/1996	Caves of cultural interest, alluvial forests.
37	Salto de la Damajagua	6.00		6.00	30/July/2004	Very humid forest, waterfall.
38	Hoyo Claro	42.00		42.00	30/July/2004	Very humid forest
39	Loma La Altagracia o Loma la Enea	1.00		1.00	30/July/2004	Very humid forest, freshwater wetlands.
40	Cabo Samaná	9.50		9.50	30/July/2004	Dry coastal forest, marble deposits (rose, grey and green).
41	Bosque Húmedo de Río San Juan	1.52		1.52	30/July/2004	Humid forest
42	Reserva Antropológica Cuevas de Borbón o del Pomier	4.43		4.43	27/October/1969	Humid forest. Caves of cultural interest
43	Cerro de San Francisco	5.50		5.50	30/July/2004	Dry forest
44	Los Cacheos	51.00		51.00	30/July/2004	Dry transition forest of a humid forest, with predominance of this palm from high and humid lands (*Pseudophoenix vinifera*).
	Total	**449.57**	**9.14**	**458.72**		
	% of National Area	**0.93**				
	IV. AREAS MANAGED FOR HABITAT/SPECIES					

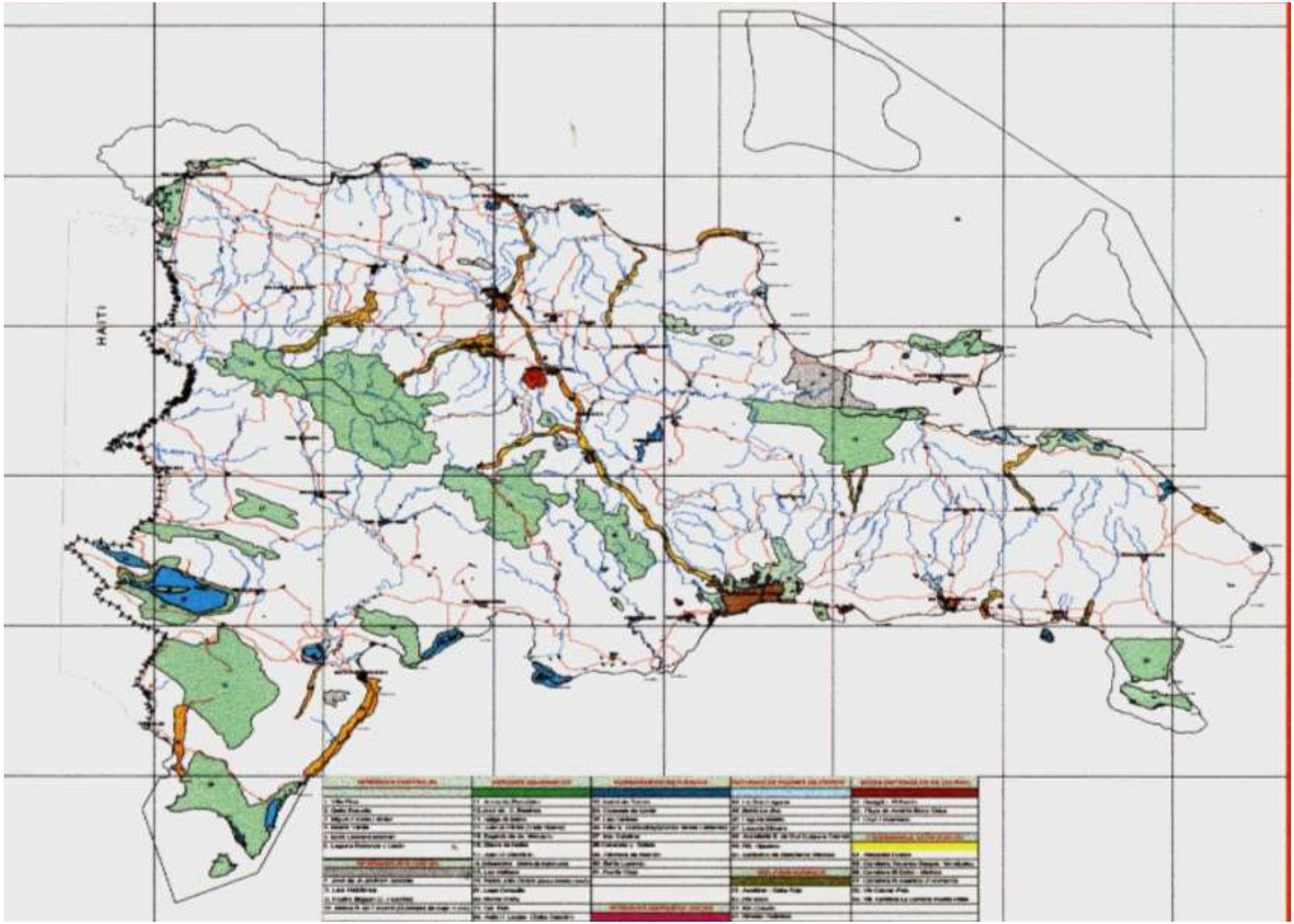
	A. Wildlife Refuges					
45	Natural Monument Miguel Domingo Fuerte	33.50		33.50	3/Julio/1996	Cloud forest and very humid forets very humid
46	Cueva de los Tres Ojos de Santo Domingo			0.00		Caves with Karstic formation formaciones relevant and and water wholes..
47	Río Chacuey	50.42		50.42	30/July/2004	Humid forest
48	Lagunas Redonda y Limón	21.40		21.40	31/December/1995	Humid forest, coastal lagoons and mangroves
49	Bahía Luperón	14.51	2.28	16.79	3/July/1996	Mangroves
50	Manglares de Puerto Viejo	8.36	6.03	14.39	31/December/1995	Dunes, mangroves, coastal lagoons and coastal- marine ecosystems
51	Cayos Siete Hermanos	0.58	133.20	133.78	30/July/2004	Dry forest, bird refuge
52	Laguna Saladilla	5.29		5.29	30/July/2004	Wetland
53	Humedales del Bajo Yaque del Sur	42.98	18.76	61.75	30/July/2004	Humedales, mangroves
54	Laguna Cabral o Rincón	58.50		58.50	11/August/1983	Wet lands, dry forest around lagoons.
55	La Gran Laguna o Perucho	6.50	4.43	10.93	31/December/1995	Wetland,
56	Manglar de la Jina	13.87	40.01	53.88	31/December/1995	Coastal wetland, rainforest, humid forest, ship wrecks (galleons) of archaeological value.
57	Lagunas de Bávaro y el Caletón	6.90		6.90	31/December/1995	Coastal lagoons, mangroves.
58	Río Soco	8.50	1.23	9.73	31/December/1995	Estuary, mangroves.
59	Ría Maimón	5.07	6.67	11.74	31/December/1995	Esturary, manglares
	Total (km²)	**276.39**	**212.62**	**489.00**		
	% of National Area	**0.57**				
	V. NATURAL RESERVES					
	Total Natural Reserves	**2,303.62**	**0.00**	**2,303.62**		
	% of National Area	**4.78**				
	A. Forest Reserves					
60	Alto Bao	281.72		281.72	30/July/2004	Humid forest, along the river border, pineares trees.
61	Alto Mao	502.09		502.09	30-Jul-04	Humid forest, pine tree forest.
62	Arroyo Cano	45.80		45.80	30/July/2004	Humid forest, pine tree forest.

63	Cerros de Chacuey	49.81		49.81	30/July/2004	Humid forest, pine tree forest.
64	Loma Novillero	13.02		13.02	30/July/2004	Humid forest, pine tree forest.
65	Cabeza de Toro	298.80		298.80	30/July/2004	Dry forest
66	Loma del 20	54.11		54.11	30/July/2004	Dry forest
67	Villarpando	82.04		82.04	30/July/2004	Dry forest
68	Guanito	70.06		70.06	30/July/2004	Dry forest
69	Las Matas	47.58		47.58	30/July/2004	Dry forest
70	Cayuco	6.75		6.75	30/July/2004	Dry forest
71	Hatillo	278.64		278.64	30/July/2004	Dry forest
72	Cerro de Bocanigua	29.06		29.06	30/July/2004	Dry forest
73	Barrero	315.47		315.47	30/July/2004	
74	Río Cana	228.68		228.68	30/July/2004	Dry forest
	Total	**2,303.62**	**0.00**	**2,303.62**		
	% of National Area	**4.78**				
	VI. PROTECTED LANDSCAPES					
	Total Protected Landscapes	**290.20**	**61.04**	**351.25**		
	% of National Area	**0.60**				
	A. Panoramic Views					
75	Mirador del Atlantico	6.94	13.29	20.23	3/July/1996	Humid forest, coastal view
76	Mirador del Paraíso	24.55	43.25	67.80	3/July/1996	Rain forest
77	Carretera El Abanico-Constanza	15.00		15.00	3/July/1996	Very wet rain forest and pluvial, cloud forest, mountain view
78	Carretera Cabral-Polo	10.00		10.00	3/July/1996	Humid forest, mountain view, cibao valley
79	Carretera Santiago-La Cumbre-Puerto Plata	11.50		11.50	3/July/1996	Humid forest, mountain view
80	Carretera Bayacanes-Jarabacoa	4.80		4.80	30/July/2004	Humid forest
81	Costa Azul	7.20		7.20	3/July/1996	Humid forest, mangroves and dry forest, coastal view
82	Entrada de Mao	48.83		48.83	3/July/1996	Dry forest
83	Carretera Nagua-Sánchez y Nagua-Cabrera	62.01		62.01	30/July/2004	Coastal views, humid forest coastal view
	Total	**190.83**	**56.54**	**247.37**		
	% of National Area	**0.40**				

	B. National Recreational Areas					
84	Cabo Rojo - Bahía de las Aguilas	38.40		38.40	30/July/2004	Sand banks, beaches
85	Guaraguao - Punta Catuano	19.50	4.50	24.00	30/July/2004	Sand banks, beaches
86	Guagüi	41.48		41.48	3/July/1997	Humid forest, bathing places.
	Total	**99.38**	**4.50**	**103.88**		
	% of National Area	**0.21**				
	Total Protected Areas	**11,450.26**	**67,814.67**	**79,541.32**		
	Grand Total of National Surface (%)	**23.76**				

Annex 3

Map of National Protected Areas
(as of 2000)



Annex 4 **PRELIMINARY THREATS, ROOT CAUSES AND BARRIERS MATRIX**

Threats	Root Causes	Management Issues/ Key Barriers	Solutions: Proposed Project Interventions Barrier Removal Activities	Baseline Activities
Systemic barriers to the effectiveness and sustainability of the national PA system:				
1. Basis of existing PA system PA system is a collection of sites rather than a designed network that is ecologically functional, connected and ecologically sustainable in the long-term Important habitats are not included in PAs and thus not protected while less important habitats are included in the PA system No connectivity among sites or functioning buffer zones	Current PA system is a historical by-product of a non-strategic approach to its development, and a reflection of compromises with other competing interests	No far-sighted development planning for the system due to the absence of an ecosystem based national PA Strategy or system plan to define the requirements and priorities and guide the development of a national PA system that effectively conserves the country's biodiversity **(1.1, 1.6)**	**Outcome 1** The enabling environment for the NPAS is enhanced **1.1** NPAS Strategy is developed and its implementation is begun **1.6** PA biodiversity information upgrading program is prepared **Outcome 5** Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond **5.2** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.4** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks	The Policy project includes a general analysis of the current status of the NPAS, characterizing its potentialities and limitations, through key axes, such as natural and cultural resources of the system, PA management categories, property and land tenure, public participation (co-management mechanisms, local governments); financial sustainability; institutional, legal and administrative frameworks, and protection and surveillance. At present there are two incipient different types of efforts being undertaken by the private sector and municipalities for the protection of biodiversity not included in the system
2. Organizational and institutional structures and processes for PA system's administration and management National administrative structure for PAs is not fully responsive to management requirements and needs at the PA level	The highly centralized and vertical command-control PA management structure is traditional and characteristic of government administration Segmentation of inter-ministerial and intra-ministerial roles and responsibilities resulting in low levels of inter-ministerial and inter-agency collaboration, and at times	No successful model of decentralized and participatory approaches to PA management **(3.1, 3.3)** No system-wide standardized TOR for PA staff positions or implemented performance reviews for most PA staff **(1.4,1.5)** No national training of staff to	**Outcome 1** The enabling environment for the NPAS is enhanced **1.2** The legal, regulatory and policy framework for the NPAS is strengthened **1.4** The organizational structure for NPAS is revised **1.5** Financial and human resource management for NPAS is strengthened **1.7** National PA training	The Ministry of Environment has started to partially implement the Law for Civil Administrative and Human Resources Management and a General Manual for Classification and Job Descriptions for each current post. This process should include also an annual review and evaluation.

Inefficiencies exist in financial and personnel management and the allocation of resources	overlapping responsibilities that promote inefficiency in resource allocation	continually upgrade skills **(1.7)** Absence of a national coordinating mechanism for PA related decisions **(1.4)**	facility for PA managers and staff is established **Outcome 3** PAs are supported through innovative partnerships, and their planning and management involves stakeholders and provides benefits to local communities **3.1** Models of co-management and other partnerships are developed and tested in pilot areas of different ecological and socio-economic characteristics (to be defined during PDF B) **3.3** Mechanisms for the participatory involvement of local communities and other key stakeholders in PA planning and management are developed and tested in pilot areas (to be defined during PDF B) **Outcome 5** Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond **1.6** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.4** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks	There are training programs given at particular PAs, but only on surveillance and forest fire management.
3. Legal, regulatory and policy base governing the PA system's administration and management, and the PA system's relations with other	National PA legislation has been changed three times over the past three decades, and the current version was born out of compromises with development	No functioning mechanism or process for integrating PA system development requirements and biodiversity conservation with national	**Outcome 1** The enabling environment for the NPAS is enhanced NPAS Strategy and PA requirements are integrated into	The Ministries of Planning and Environment are initiating coordination efforts for Land Use Planning at the national

national planning and development processes affecting land, water and biodiversity PA legislative base contains contradictions, errors, gaps and other deficiencies PA legislative and regulatory base is not effectively linked to land use planning and development and natural resource use sector policies Absence of many essential regulations for implementing PA legislation Still no endorsed national PA policy (currently being developed)	interests and has not been assessed for errors and contradictions Development of implementing regulations has been stalled due to other priorities Public policy does not integrate biodiversity conservation with economic development Economic incentives promote development at the expense of biodiversity and natural areas	territorial and development planning processes **(1.2)** No incentive mechanisms for conserving biodiversity **(1.2, 3.1)** National PA legislation deficiencies and the absence of key implementing regulations prevent the strengthening of the PA system and its effective management **(1.3)**	land, water and resource use planning processes and economic development plans **1.3** The legal, regulatory and policy framework for the NPAS is strengthened **Outcome 3** PAs are supported through innovative partnerships, and their planning and management involves stakeholders and provides benefits to local communities **3.1** Models of co-management and other partnerships are developed and tested in pilot areas of different ecological and socio-economic characteristics (to be defined during PDF B) **Outcome 5** Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond **1.4** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.4** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks	level. The NPAS policies are being formulated, with the support of the GTZ/USAID project and this process will contribute to the development of a National Biodiversity Strategy.
4. Under-financing of PA system relative to management needs and undeveloped supplementary financing mechanisms to help offset shortfall Under-financing contributing to the unsustainability and increasing deterioration of the PAs system in terms of	Competing governmental priorities on a limited budget Utilization of supplementary financing mechanisms is provided for in governing PA legislation (e.g. Environment and Natural Resources Fund) but no mechanisms for supplementary revenue generation are currently being	No model for the generation of supplementary revenue for sustaining PAs **(2.5)** Small PA constituency within government and in country **(4.2, 4.2)**	**Outcome 2** The management capacity of PAs is strengthened and their management effectiveness is increased **2.5** Innovative alternative financing mechanisms are developed and tested in pilot PAs of different categories (to be defined during PDF B) **Outcome 4**	The Ministry of Environment is initiating the implementation of the Environment and Natural Resources Fund. This could open the way for obtaining additional funds for PAs. The methodology for PAs planning, developed by the Ministry of Environment,

personnel, infrastructure, and other important elements	developed to decrease the financing shortfall		Awareness of and support for biodiversity conservation and PAs is increased among all stakeholders **4.1** Project Communications Strategy is developed and implemented **4.2** Awareness raising program on biodiversity and PAs is developed and implemented **Outcome 5** Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond **1.5** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.3** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks	includes a financial analysis for the particular PAs. As a pilot activity, in Valle Nuevo National Park , the Management Plan is proposing payments for improved land use. Another GEF/UNEP (PDF-A Phase) supported project is looking at piloting an approach for sustainability of PAs (Las Neblinas), that includes financial mechanisms, such as payments for environmental services. Innovative approaches to increasing the financial sustainability of PAs will be proposed as part of the process of the NPAS policy formulation.
Threats to PAs and their biodiversity:				
1. Loss and degradation of important <u>habitats</u> inside of PAs due to: • Incursion of agriculture and grazing into PAs • Tourism infrastructure development in and near PAs • Mining • Forest fires • Terrestrial and aquatic pollution	Decision-making does not factor in biodiversity values and requirements Boundaries of many PAs are not defined, known, or are simply ignored Uncoordinated decision-making Existing legislation not or weakly enforced Rural poverty leading to the undertaking of illegal activities	Most PAs do not have Management Plans **(2.1)** Lack of clarity concerning land tenure in and around PAs **(2.1)** Non-existent or very limited on-site management capacity in PAs to enforce compliance with legislation and regulations **(2.1, 2.3, 2.3)** General absence of basic research and monitoring programmes and thus up to date information on biodiversity and	**Outcome 2** The management capacity of PAs is strengthened and their management effectiveness is increased **2.1** Management Plans for critical PAs (to be defined during PDFB) are prepared and their implementation is begun **2.2** Essential equipment and infrastructure is acquired for key PAs (to be defined during PDF B) **2.3** PA operational and enforcement capacity is increased in critical PAs (to be	At the local level there are some initiatives for the setting up of community committees to support specific PAs. PA Forum, established as a mechanism for consultation and public participation through the policy project. Commenced analysis and characterization of land tenure in and around PAs which will be part of the process of NPAS policy formulation.

	to obtain resources and generate income for subsistence	PAs, and their values, including economic values **(2.4)** No mechanisms for involving communities in assisting in conservation management and decision-making processes in the PAs and adjacent areas Uncaring attitudes towards PAs and biodiversity among users and some stakeholders **(3.1)** Under-developed environmental consciousness and awareness of biodiversity and PAs' role and functions and support for their conservation among stakeholders **(4.1, 4.2)** Economic and other values of PAs and biodiversity are essentially not known and thus not considered in decision-making **(1.3, 1.6)** No incentive mechanism for supporting biodiversity conservation at local level **(3.1, 3.2)** No developed mechanism for PA benefit transfer to local populations **(3.2)**	determined during PDF B) **2.4** Information on selected PA biodiversity is improved through targeted research and monitoring programs (PAs to be selected during PDF B) **2.5** Innovative alternative financing mechanisms are developed and tested in pilot PAs of different categories (to be defined during PDF B) **Outcome 3** PAs are supported through innovative partnerships, and their planning and management involves stakeholders and provides benefits to local communities **3.1** Models of co-management and other partnerships are developed and tested in pilot areas of different ecological and socio-economic characteristics (to be defined during PDF B) **3.2** Mechanisms for benefit sharing with local communities are developed and tested in pilot areas (to be defined during PDF B) **3.3** Mechanisms for the participatory involvement of local communities and other key stakeholders in PA planning and management are developed and tested in pilot areas (to be defined during PDF B) **Outcome 1** The enabling environment for the NPAS is enhanced NPAS Strategy and PA requirements are integrated into land, water and resource use planning processes and economic development plans	Management plans, infrastructure development and equipment are being implemented in five PAs, with the support of German Cooperation (KfW and GTZ). Also, the management plan for the Sierra de Bahoruco National Park, with the support of Helvetas, is being edited. PAs Public Uses Monitoring System applicatin Final Draff. Another bilateral project supported by the Spanish International Cooperation Agency for the southern region of the country (Biosphere Reserve), promoting sustainable development including activities in three PAs. The strategic plan for the management of the Biosphere Reserve Jaragua-Bahoruco-Enriquillo is being edited. At the local level, some initiatives have been developed for providing benefits to communities close to some PAs, through the support for ecotourism, infrastructure development, training in handicraft production, employment of local people as tourist guides.

			1.6 PA biodiversity information is upgraded **Outcome 4** Awareness of and support for biodiversity conservation and PAs is increased among all stakeholders **4.1** Project Communications Strategy is developed and implemented **4.2** Awareness raising program on biodiversity and PAs is developed and implemented **Outcome 5** Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond **1.6** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.4** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks .	
2. Negative effects on <u>species</u> in and around PAs as a result of:	Rural poverty leads to the undertaking of illegal activities to generate income for subsistence and also for	Non-existent or limited on-site management capacity in PAs to enforce compliance with legislation and regulations at the	**Outcome 1** The enabling environment for the national protected area system is enhanced	There are training programs in some PAs, but only on surveillance and forest fire management

• Illegal fishing and hunting • Illegal collection of flora and fauna • Introduction of exotic species • Feral animals (dogs, cats, pigs. goats, *Herpestes aeropuntatus*)	commercial gain Limited economic opportunities and few options for undertaking alternative sustainable biodiversity friendly livelihoods A weak regulation and control environment presents opportunities to realize commercial gain from illegal activities without fear of the potential consequences High demand for rare, exotic species Low awareness and concern for the impacts of introduced species and feral animals on native biodiversity	local level **(2.1, 2.2, 2.3)** Not all PAs have personnel and skill sets of PA staff are deficient for the management requirements **(1.7, 5.4)** PA administrative structures are not appropriate for the range of management requirements at the site level (e.g. community outreach, education) **(1.4 3.1)** Absence of enabling financial mechanisms to stimulate alternative sustainable and biodiversity friendly livelihoods **(2.5, 3.1)** Absence of effective local controls (and corruption) creates an environment in which commercial gain from illegal activities can be readily realized **(2.1, 2.2, 2.3, 3.3)** No effective biodiversity and PA awareness raising program**(4.1, 4.2)**	The organizational structure for NPAS is revised **1.5** Financial and human resource management for NPAS is strengthened **Outcome 2** The management capacity of PAs is strengthened and their management effectiveness is increased Management Plans for critical PAs (to be defined during PDFB) are prepared and their implementation is begun **2.2** Essential equipment and infrastructure is acquired for key PAs (to be defined during PDF B) **2.3** PA operational and enforcement capacity is increased in critical PAs (to be determined during PDF B) **2.4** Information on selected PA biodiversity is improved through targeted research and monitoring programs (PAs to be selected during PDF B) **2.5** Innovative alternative financing mechanisms are developed and tested in pilot PAs of different categories (to be defined during PDF B) **Outcome 3** PAs are supported through innovative partnerships, and their planning and management involves stakeholders and provides benefits to local communities **3.1** Models of co-management and other partnerships are developed and tested in pilot areas of different ecological and socio-economic characteristics (to be defined during PDF B)	A general environmental public campaign at the national level (Cuida tu Conuco), has been designed, but with limited implementation and out-reach. GEF/SGP and a similar USAID Program for the Dominican Republic provide some support for the development of sustainable alternative economic activities, in and around PAs. Another project supported by Helvetas, provides financial support for some small sustainable productive alternative activities in Sierra of Bahoruco (where there are two PAs).

			3.2 Mechanisms for benefit sharing with local communities are developed and tested in pilot areas (to be defined during PDF B) **3.3** Mechanisms for the participatory involvement of local communities and other key stakeholders in PA planning and management are developed and tested in pilot areas (to be defined during PDF B) **Outcome 4** Awareness of and support for biodiversity conservation and PAs is increased among all stakeholders **4.1** Project Communications Strategy is developed and implemented **4.2** Awareness raising program on biodiversity and PAs is developed and implemented **Outcome 5** Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and beyond **1.7** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.4** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks	

Annex 5 PRELIMINARY FULL SIZE PROJECT STRUCTURE

Project Goal
To help safeguard the globally significant biodiversity values of the Dominican Republic.

Project Objective
To enhance the sustainability and conservation effectiveness of the national PA system and its contribution to national sustainable development.

Outcome 1	**Outcome 2**	**Outcome 3**	**Outcome 4**	**Outcome 5**
The enabling environment for the national protected area system is enhanced	The management capacity of PAs is strengthened and their management effectiveness is increased	PAs are supported through innovative partnerships, and their planning and management involves stakeholders and provides benefits to local communities	Awareness of and support for biodiversity conservation and PAs is increased among all stakeholders	Networking and collaboration among PAs is improved, and the best practices and lessons learned are disseminated and replicated within the national PA system and bevond
Outputs **1.1** NPAS Strategy is developed and its implementation is begun **1.2** NPAS Strategy and PA requirements are integrated into land, water and resource use planning processes and economic development plans **1.3** The legal, regulatory and policy framework for the NPAS is strengthened **1.4** The organizational structure for NPAS's administration is revised **1.5** Financial and human resource management for NPAS is strengthened **1.6** PA biodiversity information upgrading program is prepared **1.7** National PA training facility for PA managers and staff is established	**Outputs** **2.1** Management Plans for critical PAs (to be defined during PDFB) are prepared and their implementation is begun **2.2** Essential equipment and infrastructure is acquired for key PAs (to be defined during PDF B) **2.3** PA operational and enforcement capacity is increased in critical PAs (to be determined during PDF B) **2.4** Information on selected PA biodiversity is improved through targeted research and monitoring programs (PAs to be selected during PDF B) **2.5** Innovative alternative financing mechanisms are developed and tested in pilot PAs of different categories (to be defined during PDF B)	**Outputs** **3.1** Models of co-management and other partnerships are developed and tested in pilot areas of different ecological and socio-economic characteristics (to be defined during PDF B) **3.2** Mechanisms for benefit sharing with local communities are developed and tested in pilot areas (to be defined during PDF B) **3.3** Mechanisms for the participatory involvement of local communities and other key stakeholders in PA planning and management are developed and tested in pilot areas (to be defined during PDF B)	**Outputs** **4.1** Project Communications Strategy is developed and implemented **4.2** Awareness raising program on biodiversity and PAs is developed and implemented	**Outputs** **5.1** M&E and adaptive management applied to project in response to needs and to extract lessons **5.2** Lessons learned and best practices are disseminated nationally using the national PA management training facility **5.3** Project's best practices are replicated in three pilot areas (del Est National Park, Armando Bermudez National Park/ Carmen Ramírez and the Jaragua-Bahoruco-Enriquillo Biosphere Reserve) **5.4** Best practices and lessons learned are compiled and disseminated to PA administrators and staff in the region and globally through publications, the Internet, regional and international PA forums, and established knowledge transfer networks