



Project Document

Republic of Costa Rica

United Nations Development Programme
Global Environment Facility

Overcoming Barriers to Sustainability of Costa Rica's Protected Areas System

PIMS 3423 Atlas project ID 00056040

Brief description: Despite accounting for a mere 0.03% of the world's total terrestrial surface, Costa Rica harbours the equivalent to 4.4% of all globally known biodiversity. Worldwide, Costa Rica ranks among the 20 most biologically diverse countries in terms of total number of species, while it is among the top countries globally in regard to density (no. of species/area). The country also has the largest diversity of known plant and vertebrate species within the Central American region. Still, Costa Rica faces an apparent paradox. On the one hand, it has an extraordinary endowment in biodiversity, and has spared no effort to promote itself as a country which effectively protects a quarter of its territory and as one of the world's foremost eco-tourism destination. On the other hand, the Costa Rica state struggles with the pangs of growth of a national Protected Areas System, which has expanded over the past decades with subsequent requirements in human and financial resources. Moreover, increasingly, the ecological viability of the existing network of public protected areas and private reserves hinges on biophysical processes that go beyond the boundaries of protected areas. Hence, the long-term ecological viability of Costa Rica's Protected Areas System will to a large degree depend on its capacity to improve its current design and geographical configuration.

The proposed project will support Costa Rica in overcoming the barriers to consolidating and strengthening its Protected Areas System administered by the National System of Conservation Areas (SINAC). The aim is a System that effectively conserves a representative sample of Costa Rica's biodiversity, advance national goals and captures global benefits in a range of ecosystems. This will be achieved through five interrelated **Outcomes**: 1) Costa Rica's legal and policy framework is reformed and enhanced to ensure effective management and long-term financial and ecological sustainability of the PA System; 2) SINAC's institutional PA System framework and capacities are enhanced for eco-regional planning and optimal management effectiveness; 3) SINAC has the financial sustainability to effectively attain its strategic objectives and provide resources for long-term PA System management needs; 4) SINAC tests new and innovative conservation approaches at the Conservation Area and PA levels; and 5) successful PA System management models are scaled-up and replicated at the systemic level through strategic partnerships with key stakeholders. On-site pilot interventions will enable ground-proofing of the reformed legal and policy frameworks, testing and development of new tools for enhancing PA management effectiveness - including different PA governance models - while hosting training and awareness raising activities. Given that the long-term sustainability of the PA System will depend on Costa Rica's ability to secure sufficient financial resources to meet the management costs of the PA units, sustainable financing has been addressed as a cross-cutting component.

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ACRONYMS

ACCVC	Area de Conservación Cordillera Volcánica Central
ACOSA	Area de Conservación Osa
ACOPAC	Area de Conservación Pacífico Central
ACT	Area de Conservación Tempisque
ACTo	Area de Conservación Tortuguero
ANR	Absolute Natural Reserve
APR	Annual Project Report
BR	Biological Reserve
CBD	Convention of Biological Diversity
CCC	Caribbean Conservation Corporation
CEDARENA	Centre of Natural Resources and Environmental Law
CCF	Country Cooperation Framework
CI	Conservation International
CINPE	International Centre of Economic and Political Studies
CITES	International Convention of Trade with Endangered Species
CO	Country Office
COBODES	Forest Conservation and Environmental Sustainability in ACTo
CONAC	National Council on Conservation Areas
CONAGEBIO	National Biodiversity Council
COVIRENAS	Collaborative Management PA Volunteers
DIPs	Deeping participatory and inclusionary practices
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
ESPH	Empresa de Servicios Públicos de Heredia
FECON	Federation of Environmental NGO's.
FONAFIFO	Forest Financing Fund
FUNDECOR	Foundation of Cordillera Volcánica Central
FR	Forest Reserve
FSP	Full Size Project
GEF	Global Environment Facility
GoCR	Government of Costa Rica
IA	Implementing Agency
IADB	Inter-American Development Bank
ICE	Costa Rican Institute of Electricity (<i>Instituto Costarricense de Electricidad</i>)
ICT	National Tourism Institute
ICT	Information and Communications Technology
IDA	Institute for Agrarian Development
IFAM	Instituto de Fomento y Asesoría Municipal
INBio	National Institute for Biodiversity
IUCN	The World Conservation Union
KMS	Knowledge Management System
LA	Latin America
LPACs	Local PA Councils
LSM	Land System Model
MAG	Agriculture Ministry
MIDEPLAN	Ministry of Planning
MINAE	Ministry of the Environment and Energy
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
METT	Management Effectiveness Tracking Tool
MSP	Medium-sized Project
NA	National Park
NM	National Monument

NMI	National Meteorology Institute
NBSAP	National Biodiversity Strategy Action Plan
NBS	National Biodiversity Strategy
NEX	Nationally Executed
NGO	Non-government Organization
NP	National Park
NPC	National Project Coordinator
NPD	National Project Director
NTFP	Non-Timber Forest Products
PA	Protected Area
PAS	Protected Area System
PES	Payments for Environmental Services
PIR	Project Implementation Review
PDF	Project Development Funds
PMU	Program Management Unit
PSC	Project Steering Committee
PZ	Protected Zone
SETENA	Environmental National Secretariat
SBAA	Standard Basic Agreement
SINAC	National System of Conservation Areas
TNC	The Nature Conservancy
TSC	Tropical Science Center
UCI-ELAP	University of International Cooperation
UCR	University of Costa Rica
UNA	National University (<i>Universidad Nacional</i>)
UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNEP	United Nations Environment Program
UNDP	United Nations Development Program
WB	World Bank
WL	Wetlands
WR	Wildlife Refuge
WCS	Wildlife Conservation Society
WTO	World Tourism Organization
WWF	World Wildlife Fund

SECTION I: ELABORATION OF THE NARRATIVE

PART I: SITUATION ANALYSIS

Part I A: Context

I- 1. Global Significance of Costa Rica's Biodiversity

1. Costa Rica is located in Central America and borders with Nicaragua to the North, Panama to the South, the Atlantic Ocean to the East, and the Pacific Ocean to the West. While its terrestrial surface area covers only 52,100 square kilometres, its marine extension is 10 times larger (589,000 km²). The country is a significant contributor to the Central American region's unique biological diversity, which harbours 3 biomes, 20 life-zones, 33 eco-regions, and more than 60 plant formations. Overall, about 350 landscape forms range from cloud forests with rainfall greater than 7,500 mm to thorn scrub in semiarid areas, where the rainfall reaches only 400 mm. Costa Rica itself is divided into 7 distinct eco-regions¹: (a) Central American Dry Forest; (b) Costa Rican Seasonal Moist Forest; (c) Isthmian Atlantic Moist Forest; (d) Isthmian Pacific Moist Forest; (e) Volcanic Range and Talamanca Mountain Forests; (f) Pacific Mangrove Forest; and (g) Eastern Tropical Pacific Islands. These eco-regions boast a wide range of micro-climates, from warm and humid on the Caribbean side to warm and dry in the Pacific basin and cold at its mountain summits. This is mainly due to a mix of climatic and altitudinal factors, the thermal regulation of both oceans, and an active geological history marked by volcanism and seismic activity.

2. Costa Rica hosts a wide variety of both marine and terrestrial ecosystems and is considered one of only nine countries worldwide with an extremely high diversity of forest ecosystem organisms (Obando, 2002).² Habitats span from dry tropical forests, swamps, mangrove forests, rainforests, cloud forests, coral reefs, beaches, high mountain wetlands, lakes, rivers and plains. Despite the predominance of neo-tropical flora and fauna, neoarctic species have been identified at higher altitudes. Moreover, despite accounting for a mere 0.03% of the world's total terrestrial surface, the country harbours the equivalent to 4.4% of all globally known biodiversity (nearly 200,000 recorded species).³ Overall, Costa Rica possesses 5% of the globally known vertebrates and 3.7% of plants, 35% of cetaceans (28 out of 80 species of whales and dolphins known worldwide are present in the country), and 5% of known snakes. With 109 species, bats represent about half of the mammals present in the country (45%) (Rodriguez, B and Wilson, D.E. 1999).⁴ Worldwide, Costa Rica ranks among the 20 most biologically diverse countries in terms of total number of species, while it is among the top countries globally in regard to density (no. of species/area) (Obando, 2002). The country also has the largest known plant and vertebrate species diversity in Central America.⁵

3. In terms of *endangered species*, Table 15 in Section IV: Part IV provides a detailed overview of the status of species in Costa Rica according to different national and international instruments/measures. Nationally, MINAE is responsible for issuing a decree with a list of threatened and endangered species, which is considered the country's official instrument. Overall, there are 1,606 species included in this decree, representing close to 2% of the biodiversity described for the country (Obando, 2002). According

¹ For more details on each eco-region, see Section IV: Part IV. The full definition of an eco-region is the following: A large area of land or water that contains a geographically distinct assemblage of natural communities that (a) share a large majority of their species and ecological dynamics; (b) share similar environmental conditions, and; (c) interact ecologically in ways that are critical for their long-term persistence. --World Wildlife Fund - Eco-regions.

² Details of the general description of the different types of coastal-marine and terrestrial ecosystems present in the country can be found in Obando, 2002 and subsequent updates at <http://www.inbio.ac.cr>.

³ Millennium Ecosystem Assessment, 2005b.

⁴ Table 13 in Section IV: Part I provides a detailed overview of species diversity by taxonomy groups.

⁵ For a comparative overview, please see INBio PDF B Study for more details.

to the current decree N° 26435, amphibians have the highest percentage of threatened species - 45.5% or close to half of all known species in the country. This group is followed by reptiles, with 12% of populations threatened and 3.5% in danger of extinction. Last are birds and mammals, with 9.6% and 6% of their populations threatened, respectively, and 6% and 5.5% of them endangered. Moreover, 10% of known vertebrate species in Costa Rica are threatened or in danger of extinction. With regards to plants, populations of 1,303 species are threatened or diminished. Forty species are mentioned as having populations in danger of extinction (mainly orchids), and 18 wood species in danger of extinction were added to the list as a result of the 1997 *Decreto de Veda* (Prohibition Decree) N° 25700 (Obando, 2002).

4. Beyond the national records, the CITES Convention (Convention on International Trade in Endangered Species of Wild Flora and Fauna) lists 6 amphibian species, 15 reptile species, 126 bird species and 37 mammal species for Costa Rica for a total of 184 endangered species (UNEP-WCMC, 2004). The IUCN's red list for Costa Rica includes 398 species (240 animal and 158 plant species). The IUCN also reports 181 globally threatened species in Costa Rica (only those classified as vulnerable, in danger and critically endangered). Concerning *endemism*, Costa Rica presents a moderate level of 1.3% with respect to known species. The highest level of endemism is again found among amphibians, followed by freshwater fish. Table 14 in Section IV: Part IV shows the number of endemic species in the major known groups in Costa Rica with comparative data for 1992-2006. Yet, for 2006, the percentages of endemism are 5.3% among reptiles, 16% among amphibians, 14% among freshwater fish, 0.8% among birds, 2.5% among mammals and 10% among plants.

I - 2. Costa Rica's existing Protected Areas System

5. Costa Rica's present Protected Areas System (PAS) is the result of a process that started in the early 19th Century. The legal grounds for the system in its current form were laid down in 1955. Yet, even with significant progress made by the country regarding its legal and institutional framework, there is still no clear recognized definition for the PAS and its conservation objectives and goals. The following sections provide more details on the PAS: Section IV: Part V provides details on its evolution and eco-representativity, Section I-4 on its legal context, and Section I-5 on its institutional framework.

6. The current PA administration framework - the so-called *National System of Conservation Areas - SINAC (Sistema Nacional de Áreas de Conservación)* - was introduced in 1989. This new scheme was intended to serve a number of purposes: (i) Integrating administration of all PAs under a single entity; (ii) decentralizing and de-concentrating administration through "Regional Conservation Units", which subsequently gave rise to the present 11 "*Conservation Areas*"; (iii) grouping together adjoining or neighbouring PAs for administrative purposes; (iv) creating collegiate structures for decision-making; (v) providing for agile financial mechanisms (including patrimonial funds), and (vi) integrating research and planning efforts as management and decision-making instruments. The Conservation Areas modality to facilitate PA administrative management and biodiversity protection was officially adopted in 1998, by means of the *Biodiversity Law (Ley de Biodiversidad)*, leading to the creation of today's SINAC. Under this scheme, PAs are brought together under a single *National Protected Areas System - SINAP (El Sistema Nacional de Áreas Silvestres Protegidas)*. In turn, SINAP is an integral part of the above broader system - SINAC - that notably also provides for the management of natural resources found outside protected areas, given that the 11 Conservation Areas jointly cover the total territory of Costa Rica.

7. At present, Costa Rica's PA System includes a total of 160 PA units. The location of both land and marine/coastal PA is presented in Map 3, Section IV: Part V. Notably, the current PA System is managed based on an incipient **eco-regional approach**, which was established by the GRUAS I⁶ project in 1996. This initiative supported the Government in territorial planning for biodiversity conservation. It also

⁶ Phase I of Propuesta Técnica de Ordenamiento Territorial con Fines de Conservación de la Biodiversidad en Costa Rica.

introduced the concept of biological corridors and private conservation areas as elements of the national in-situ conservation system, emphasizing landscape-level conservation goals.

Table 1. - Protected areas in Costa Rica as of 2006.
Continental and marine extension/coverage per management category

Management Category	Number of Protected areas	Protected Continental Surface (Ha)	Percentage of National Continental Surface ⁷	Protected Sea Surface (Ha)	Percentage of National Sea Surface ⁸	Total PA surface (Ha)
1. National Park	27	625,531	12.24	475,620	0.81	1,101,151
2. Biological Reserve	8	22,032	0.43	5,207	0.01	27,239
3. Wildlife Refuge	67	243,040	4.76	18,425	0.03	261,465
4. Protected Zone	31	153,506	3.00			153,506
5. Forest Reserve	9	221,239	4.33			221,239
6. Absolute Natural Reserve	2	1,314	0.03	1,612	0.00	2,926
7. National Monument	1	230	0.13			230
8. Wetland	13	66,388	1.41	5	0.00	66,393
9. Other PA (Natural Monument)	2	6,299	0.14			6,299
TOTAL	160	1,339,579	26.21	500,869	0.85	1,840,448

Source: Adapted from MINAE. National System of Conservation Areas (SINAC). National Report. II Mesoamerican Congress of Protected Areas. April 2006.

8. All the PA units are declared by the State and correspond to the above 9 distinct management categories. Several tables in Section IV: Part V provide a more detailed picture of the PA Units. First, Table 17 shows the number of PAs under each category and the PA System extension, which represents a total of 1,840,448 ha – or equivalent to 26.21% of the national continental territory and 0.85% of the national sea surface. Then Table 18 shows how these 9 management categories cover 5 of the 6 management categories proposed by IUCN. However, the correlation between the international nomenclature and Costa Rican management categories is approximate, and to date there is no official document in the country that formally establishes these. Costa Rica also boasts a number of internationally recognized protected areas, including 11 Ramsar Sites, 2 Biosphere Reserves and 3 World Heritage Sites (see Table 19). During the past three years, 1 new globally significant wetlands area (Talamanca Peat Bogs) was included and work was undertaken to obtain the designation of Corcovado National Park and the Cocos Island Biological Reserve as new natural World Heritage Sites.

⁷ 51,100 Km²

⁸ Includes Costa Rica's Exclusive Economic Zone. i.e. 589,000km².

9. In parallel with establishing PAs, Costa Rica has taken additional complementary conservation measures, which in turn have strengthened the PAs. Taken together (PAs and the below), all of these conservation measures cover more than 30% of Costa Rica's continental surface:

- a) Payment of environmental services for protecting biodiversity, a scheme covering over 450,000 ha (80% natural forest) (O. Sánchez, Personal Communication, 2005);
- b) Biological Corridors: A system of biological corridors has been designed⁹ to ensure the ecological viability of the PA System;
- c) Network of Private Reserves: A private initiative that has brought together some 100 members since 1995, who have allotted part of their lands to conservation out of their own initiative. At present the Network covers roughly 60,000 ha; and
- d) Indigenous Territories: A total of 24 so-called "Indigenous Territories" have been established in Costa Rica, covering 330,500 ha., i.e. some 6.5% of the country's land surface. A significant share of these lands borders national parks and biological preserves, thereby serving as buffer zones.

Protected areas and land tenure

10. To create new PAs in Costa Rica, the land can either be donated to the State by landowners on a voluntary basis, or it can be bought or expropriated by the State. As a result, the establishment of PAs has involved substantial investments by the State in real estate through purchases of land of importance for biodiversity conservation. While the State is obligated by Law to pay for National Parks and Biological Reserves in their entirety, there is still about of 10 % of these existing PA System that remains in private hands, as the State has yet to pay for the acquired land. More specifically, Table 20 in Section IV, Part V shows that while most of the land under National Parks (92%) is owned by the State, 63% of Wildlife Refuges are in private lands. The total debt still owed by the State amounts to over US\$76 million, if adjusted for inflation. This debt weighs considerably on SINAC's financial balance sheet, who estimates that it will take the country no less than 23 years of continuous effort to acquire all of the land owed today - assuming that no additional new PAs are added. This condition itself is quite uncertain, given that the results of the GRUAS II project (see paras 24-25) are not yet available, which makes it impossible to predict at present whether the PA System will require adjustments, much less define their scope.¹⁰

Analysis of the PA System eco-representativity

11. Notably, while Costa Rica hosts a wide variety of both marine and terrestrial ecosystems, to date the country has no official ecosystem classification system.¹¹ The country therefore lacks up-to-date baseline studies on the state of conservation of biological populations - especially of endangered species, as well as biological monitoring mechanisms to learn about the ecosystems health, both within and outside PAs. In addition, officials have a limited capacity to promote the production and understanding of such information. Hence, few studies have been carried out to systematically analyze the diversity of terrestrial ecosystems and their conservation status. More recently, INBio and SINAC have developed Ecomaps that cover close to 60% of the country and provide greater detail than the other systems (Acevedo, H. 2006, personal conversation). There is also a map of botanical eco-regions produced by INBio, as well as an eco-region map by WWF. Hence, for the past decade, Costa Rica's forest coverage has been determined at the macro level, specifically through the *Forest Financing Fund* (Fondo de Financiamiento Forestal – FONAFIFO) under the *Ministry of Environment and Energy* (MINAE). Yet, this forest coverage map includes only a few coverage types, making it difficult to obtain precise

⁹ There are roughly 33 biological corridors created within the country, and while this is not a requirement and it does not ensure their functioning, 5 of these corridors were created by Executive Decree (Barbudal, La Cruz-Fronterizo, la Mula, Braulio Carrillo, and La Selva) (XI Report on the State of the Nation, 2005.)

¹⁰ MINAE. National System of Conservation Areas (SINAC). National Report. II Mesoamerican Congress of Protected Areas. April 2006.

¹¹ The most commonly used ecosystem classification systems are: (i) the Holdridge Life Zones; (ii) Gómez and Herrera's Vegetation Macro-types (1986); and (iii) Biotic Units (Gómez & Herrera, 1993).

information on the remaining ecosystem types. The most recent initiative is the **GRUAS II**¹² process (see para 24 and Section IV: Part VI), launched in 2005, which is producing land use maps based on ecosystems and species representativity for conservation purposes by using the above Vegetation Macro-types supported by Ecomaps.

12. A PDF B Study carried out by INBio¹³ therefore used the GRUAS II findings and Gómez and Herrera's Vegetation Macro-types system from 1986 to conduct a general analysis of the ecosystem conservation status within the PA System. Vegetation macro-types were used as a proxy indicator for ecosystems, which combine previous classifications - such as Holdridge's Life Zones - with floristic characteristics and forest types to produce a potential classification system. The Study identified a total of 52 vegetation types for Costa Rica divided into 4 geographic regions: (i) North Pacific and the Central Valley; (ii) mountainous regions; (iii) South Pacific and (iv) Atlantic.¹⁴ The analysis was based on a land cover map of Costa Rica of Year 2005 and a detailed analysis of the state of conservation in each of the 52 vegetation macro-types (see Table 16 in Section IV: Part IV).

13. INBio's analysis shows that Costa Rica's different conservation measures (see para. 9) are playing an important role for the ecological viability of conservation in the country. A synopsis of the analysis is provided in Table 21 in Section IV, Part V. Yet, the Study also illustrates that there is still room for improvement in terms of consolidating Costa Rica's PA System. The study highlighted that more than 50% of the natural cover of existing ecosystems has been lost. While the situation of tropical and pre-montane formations is complex, the pre-montane tropical rainforests are in the most critical state (90% of natural cover lost).¹⁵ Moreover, there are important gaps in the system in ecological terms, as some ecosystems are better represented - such as montane and pre-montane rain forests and lowland tropical forest - due to large blocks of protected areas in the Talamanca range and Osa Peninsula (see Part IV, Map 3). Although all 52 vegetation macro-types are included within the PA System, both (i) Semi-deciduous lowland forests, and (ii) shrub vegetation fail to meet the condition on adequate size (at least 15% of their share of land). Another important finding is that a significant amount of the vegetation macro-types is also found outside the PA System (see Part IV, Table 16).

14. The findings also highlighted that while terrestrial ecosystems are relatively well-represented in the System, coastal and marine ecosystems are dramatically under-represented. The Interdisciplinary Commission for Marine and Coastal Areas of Costa Rica's Exclusive Economic Zone¹⁶ carried out an analysis on the main marine environments in 2006, which recommends protecting eight key areas due to their biological and ecological characteristics, and the critical threats they face.¹⁷ Yet, at present, only 19 of the 160 protected areas cover marine ecosystems – or only about 0.0070 % of Costa Rica's marine territory, which is ten times its land area. The INBio PDF B study also points out that all of these protected sea areas are located between internal waters and the country's 12 miles of territorial sea, thereby leaving the remaining 188 miles of EEZ with very few or no effective protection measures whatsoever. For more information about marine and marine/coastal PAs, see Table 17, Part V.

15. Based on its thorough analysis, the INBio PDF B study concludes that a ***different environmental management model is needed that envisions what is happening both within and outside PAs, which consider the biophysical processes taking place in larger land units.*** More specifically, the findings

¹² Phase II of Propuesta Técnica de Ordenamiento Territorial con Fines de Conservación de la Biodiversidad en Costa Rica.

¹³ INBio, Evaluación de la situación actual de la biodiversidad y la sostenibilidad / representatividad ecológica del Sistema de Áreas Silvestres Protegidas

¹⁴ A detailed description of each of these macro-types is presented in Annex 5 in the INBio PDF B study.

¹⁵ To complement the analysis at the ecosystems level, the INBio PDF B Study also presents detailed information about the state of conservation in Costa Rica from a landscape point of view for terrestrial land in the country.

¹⁶ *Comisión Interdisciplinaria Marino Costera de la Zona Económica Exclusiva de Costa Rica.*

¹⁷ These areas are the following: i) Gulf of Papagayo and Culebra Bay; ii) Dulce Gulf; iii) Caño Island; iv) Sierpe-Terraba System; v) Gulf of Nicoya; vi) Coco Island, vii) Northern Caribbean Zone (Tortuguero National Park); and viii) Southern Caribbean Zone (Gandoca-Manzanillo National Wildlife Refuge).

support that the ecological viability of the PA System and its PA Units will depend on the way conservation efforts are managed in the country, with PAs being one important and integral part of this process. Furthermore, INBio concludes that many of the sites selected as "biological corridors" not only play a connectivity role, but they are also important for "habitat" protection, as the 23 macro-types found here not represented in the other sub-systems show. In this context, it will be essential to have an integrated, systemic view of the PAs under the above various sub-systems, as well as on other measures contributing to conservation, such as indigenous territories and biological corridors in their current role,¹⁸ and even the system of payment for environmental services for conservation. Given that Costa Rica's Protected Area System¹⁹ currently does not have a stated definition, the following was proposed in the study: *"The Integration of all PAs established by law under different management categories, as well as their inter-relation with other conservation measures adopted outside PAs, whose aim is to ensure that the system meets the characteristics of representativeness, comprehensiveness, balance, adequacy, coherence and complementarity, and consistency."*

I - 3. Socio-economic Context

16. Costa Rica has a population of about 4.0 million, of which 59% is classified as urban. The majority of the population is concentrated in the San José Province (35%). From an administrative policy perspective, the country is divided into 7 provinces, 81 counties (*cantones*) and 463 districts.²⁰ The political stability, economic development and a social structure, which is characterized by an ample middle class, distinguishes Costa Rica from other Central American countries. Yet, although Costa Rica boasts one of the lowest unemployment rates (6.4% for 2001-2004) in the region and an average GDP growth rate of 4.45%, a fifth of its population remain poor. While maintaining its economic and social indicators above regional averages, between 1990 and 2000 the country's Human Development Index fell from position 28 to 48, and poverty levels have not decreased in over a decade. Notably, rural poverty is a predominant factor in the areas where most PAs are located, where average poverty levels of 24.9% are higher than in the rest of the country. One explanation is the general need for national policies to filter down to the regional, municipal and local level to enable direct involvement by key local stakeholders. Decision-making in conservation has been consistently centralized in the hands of national institutions, with recent decisions by the Comptroller General's Office (*Contraloría General de la República*) critical of on-going informal collaborative management arrangements in several National Parks in Costa Rica. Moreover, economic linkages between high growth sectors - such as electronics, biotechnology, international services and tourism - and the rural poor have yet to be achieved.

Sustainable tourism and protected areas

17. Costa Rica's protected areas are increasingly contributing to the economic development of the country through the impressive growth in eco-tourism the country has experienced for the past 10 years. Over 1.65 million international tourists visited Costa Rica in 2004 and an annual growth rate of 6.6% is expected for the next 6 years. One of the country's most important characteristics is the wide variety of recreational activities it offers, most of which are related to nature. Among these, the "sun and sand" segment continues to hold first place (79.9%), followed by ecotourism and similar forms of tourism, including "flora and fauna observation" (58.3%). All these segments are expected to demonstrate similar growth patterns. Notably, according to ICT (National Tourism Institute), close to 60% of all international tourists that come to Costa Rica claim they visited the country's protected areas. Regarding local inhabitants, 66% of Costa Ricans claim to have visited a protected area at least once in their lifetime.

¹⁸ This means not only as mechanisms to allow for the flow of genes and species, but also in their role of protecting habitats and ecosystems, as noted in the above sections.

¹⁹ This definition is based on international concepts and criteria on what a Protected Area Systems is supposed to be, as well as on the country's current legal framework.

²⁰ GEO Costa Rica: Una Perspectiva Sobre El Medio Ambiente 2002, MINAE, UNEP, 2002

Table 2. - Visitation to Costa Rica's Protected Areas (1982-2004)

VISITORS	1982	%	1992	%	2002	%	2004	%
RESIDENTS	136,958	68%	301,644	47%	507,801	55%	541,189	47%
NON-RESIDENTS	64,745	32%	338,109	53%	411,831	45%	501,664	53%
TOTAL	201,703	100%	639,753	100%	919,632	100%	1,042,853	100%

Source: M. Adamson, CIESA, based on Bermúdez, F. (1992) and Y. Mena, SINAC.

18. Today, tourism generates more foreign currency than agricultural and livestock exports, and is only surpassed by revenues generated by the industrial sector and duty free zones. In 2005, income from tourism amounted to USD 1,600 million, or about 7.4% of Costa Rica's GDP. A PDF B study carried out by CINPE estimates that MINAE received a total of US\$ 3,248,000 from tourist's visitation for 2002, through PA entrance fees. It also estimates that SINAC contributed a total of US\$ 3,251,711,588 through the provision of environmental goods and services to Costa Rica's economy - equivalent to 5.5% of its GDP. This income was generated from services derived from healthy ecosystems through activities, such as tourism, regulation of water resources for hydroelectric generation, employment generation, and bio-prospection. For instance, in 2002, sea turtle tourism in Tortuguero National Park generated an estimated US\$ 6,714,483 in gross revenue. Notably, this makes SINAC a larger contributor to the national economy than several major export commodities, such as bananas or coffee.

19. Different PDF B studies clearly demonstrate that not only do sustainable tourism and protected areas contribute significantly to Costa Rica's economic development as a whole, they also constitute a strong employment potential among communities located in and around protected areas, especially those near highly visited Pas. While direct employment in the tourism sector represents 5.7% of the workforce, indirect employment has a multiplier effect in both urban and rural areas of the country. A study by CINPE concerning the communities around Chirripó, Cahuita and Poás National Parks showed that local youth were often involved as tourist guides, while local restaurants and hotels directly benefited from the influx of tourists attracted by the protected areas (CINPE, 2004). Yet SINAC and the country's PA System still face major challenges in terms of insufficient public awareness and inter-sectoral alliances to actively pursue stronger PA management alliances with local actors.

I - 4. Policy and Legislative Context

20. At the international level, Costa Rica is signatory to a series of environmental agreements and conventions. These include the *Convention on Biological Diversity* (CBD), the *Convention on International Trade in Endangered Species of Wild Flora and Fauna* (CITES); and the *Convention on Wetlands of International Importance especially as Waterfowl Habitat* (Ramsar). Moreover, some of the ratified international conventions have also adopted as law in the country (e.g. CITES; Ramsar and CBD). Domestically, these laws are complemented by Costa Rica's Constitutional mandate and other significant advances concerning the national environmental legal framework. For instance, Article 50 of the Constitution stipulates that "all individuals have the right to a healthy and ecologically balanced environment. For this reason it is legitimate to denounce actions that infringe upon that right and demand reparation for the damage caused. The State shall guarantee, defend and safeguard that right." [Unofficial translation]. Below follows a brief introduction to the international and national legal context of particular relevance for PA management and eco-tourism in Costa Rica. For a detailed overview of both international and national environmental regulation, see Section IV: Part VII.

Specific laws concerning SINAC and protected areas management

21. In October 2006, Costa Rica's Constitutional Court dismissed appeals questioning the constitutionality of the *Law of Biodiversity (Ley de Biodiversidad)* N° 7788. This move dispelled all previous legal uncertainties concerning SINAC's mandate. At that point the Law finally legally established that SINAC is charged with defining policies and planning and implementing processes aimed

at achieving the sustainable management of Costa Rica's natural resources (Article 22). It also cements that Costa Rica's PA System is a sub-system of the *National Conservation Areas System* (*Sistema Nacional de Áreas de Conservación* - SINAC) (see also Section I-5), which in turn is an administrative department of the *Ministry of the Environment and Energy* (MINAE). This Law created SINAC as a separate legal entity, defining it as a body for institutional management and coordination that is decentralized and participatory, and which has jurisdiction in matters of forestry, wildlife and protected areas. Article 28 defines the 11 Conservation Areas under SINAC auspices as administratively delimited territorial units, yet still governed by the same development and administration strategy and duly coordinated with the rest of the public sector. Given that together these Areas cover the entire territorial landmass of Costa Rica, they include inter-related public and private conservation activities, as well as human settlements (urban and rural) and lands used for productive activities, in addition to PAs.

22. Despite the recent full implementation of the Law of Biodiversity, Costa Rica still lacks a framework law or policy for protected areas that could unify the current legal framework. This framework is presently somewhat dispersed and contains some redundancies and conceptual gaps as a result of the numerous laws (most sector-specific) passed over the last three decades in response to specific problems and in different contexts. Indeed, the *Agenda for Protected Areas Administrated by SINAC* (SINAC-MINAE 2003) expresses the crucial need for a modern, forward-looking legal framework for Costa Rica's PAs. For other laws that concerns PAs, see Section IV: Part VII. Concerning local collaboration, Article 33 in the *Organic Law of the Environment* N° 7554 (1995) empowers MINAE to create Natural Monuments, while at the same time making municipal corporations (local governments) responsible for their administration. This Law also outlines PA objectives. Moreover, there is one legal mechanism that allows for the private administration of certain protected areas recognized by the State, namely privately owned national Wildlife Refuges.²¹

National policies, strategies and programmes for protected areas management and eco-tourism

23. Despite numerous processes of strategic planning conducted over the past two decades, there is still a need for the enhancement, consolidation and management of the SINAP as a Protected Areas System. A decade ago, Costa Rica's first national land use plan for biodiversity conservation was designed, known as the **GRUAS I Project** (García-Viquez 1996). This plan provided the most up-to-date analysis of the state of terrestrial ecosystems, and identified priority measures to protect the remaining biodiversity located outside PAs, through the creation of new PAs and the re-design or change of management category of existing PAs. While close to half (43) of the proposed measures contemplated state-administered PAs, the rest sought to explore private conservation mechanisms, such as private reserves, biological corridors and conservation easements. To this date only 20% of the GRUAS I-proposed priority conservation measures have been implemented, covering 12% of the land under state-administered PAs (Arias-Castillo 2005a). GRUAS I did pave the way, however, to a variety of private conservation schemes, and also led to the creation of many biological corridors, which are still functioning today as voluntary conservation arrangements in biologically important areas of the country.

24. In 2003, an *Agenda for Protected Areas* was published. Yet, this Agenda only provided a list of requirements without the needed underlying strategic vision to achieve the desired results. The remaining need for a conceptual strategic planning framework for *In Situ* Conservation in Costa Rica is currently being addressed by a GRUAS II Task Force. GRUAS II is a partnership between SINAC, TNC, CI and INBio, which seeks to update the original conservation plan proposed in 1996. Over the past decade, Costa Rica's knowledge and information management on biodiversity has increased considerably, mostly thanks to public-private partnerships, such as INBio, as well as to public research organizations (OTS, CCT, CATIE, and Universities). GRUAS II is therefore reviewing the state of ecosystem management, biological corridors and protected areas in Costa Rica and suggesting new ways of conserving biodiversity - both inside and outside the current parks system.

²¹ Law N° 7317, article 82.

25. GRUAS II proposes an **Eco-regional Approach** that promotes the functionality of the large ecosystems in the country and their ecological health and integrity. Moreover, this Approach includes the identification of gaps in PA coverage, full evaluations of management deficiencies, and the definition of criteria for selecting the areas to be incorporated into the system in a clear and efficient manner. GRUAS II will provide a key planning tool, which will re-consider existing PA management categories and promote the creation of new areas – either by establishing them by Law or by revising existing ones. A preliminary list of 54 priority conservation measures has been drafted, this time with a clear emphasis on coastal and marine ecosystems (Arias-Castillo 2005b) *Hence, not only will GRUAS II provide a much-needed strategic vision and framework for the planning of PAs in the coming years in Costa Rica. This GEF project has also been consciously formulated to build on this foundation in its support of Costa Rica’s objective of consolidating its PA System according to this new vision and framework.*

26. To date, Costa Rica has no specific approved development strategy for SINAC as a whole (i.e. a strategy for the overall 11 Conservation Areas). In response to this strategic gap, SINAC’s first draft *Strategic Management Plan* (from 2000) is currently being revised. TNC will provide SINAC with institutional support with several programs for budgetary planning and financial strategy, a support to ecological monitoring strategy and the training of park wardens and other SINAC Staff. Notably, the initial Plan clearly identified the need to formulate a *National Framework Plan for the national PA System as its own entity within the larger SINAC/Conservation Area context as well*. Such a plan is also provided for under the *Protected Area Work Program of the Convention on Biological Diversity*.²² However, to date, such a Plan does not exist.

27. Concerning tourism, to date SINAC has developed a series of policies and strategies to plan for the development of tourism inside PAs. In 2000, a partnership with TNC enabled SINAC to develop *the National Strategy for Conservation and Sustainable Use of Biodiversity* formulated as part of the commitments from ratifying the CBD.²³ This document provides for “*strengthening technical capacity to ensure the proper biodiversity management, including the incorporation of local organizations in activities to develop protected wilderness areas, including the concession of non-essential services for eco-tourism [emphasis added].*” It also proposes the development of opportunities to fund PA management, promoting capacity building in conservation areas to generate resources for the provision of services, including tourism in PAs. In addition, a national plan for tourism development in the PA System defines more precisely the range of products and tourism attractions, while providing recommendations to improve visitation facilities and services provided by SINAC. The latter is to be carried out in close coordination with ICT, municipal governments, NGOs and community-based organizations. SINAC is also reviewing its entrance fees and tariffs, which would enable a more flexible system for gathering revenue, including innovative parks passes and season tickets sold through tourism operators.

28. At present, SINAC is negotiating its *Sustainable Tourism Programme (Programa de Turismo Sostenible)* jointly with ICT (*Instituto Costarricense de Turismo*) and IADB to address the issue of linking PA management and the tourism industry more effectively. This strategic Programme aims to upgrade the capacity for tourist reception in 39 PAs, and will channel major investments into infrastructure in 10 PAs managed by SINAC, currently subject to high growth of tourist visitation. Sustainable tourism-related pilots are currently under way in Corcovado, Manuel Antonio and Braulio Carrillo National Parks, where this Programme will invest in infrastructure improvement. A market study was conducted for each of these PAs, and a business plan has been drafted for the development of tourism-related activities in and around these three PAs. Capacity development plans for park management staff and a monitoring system will be put into place to assess the impact of these investments in infrastructure within PAs to improve revenue capture related to the tourism industry.

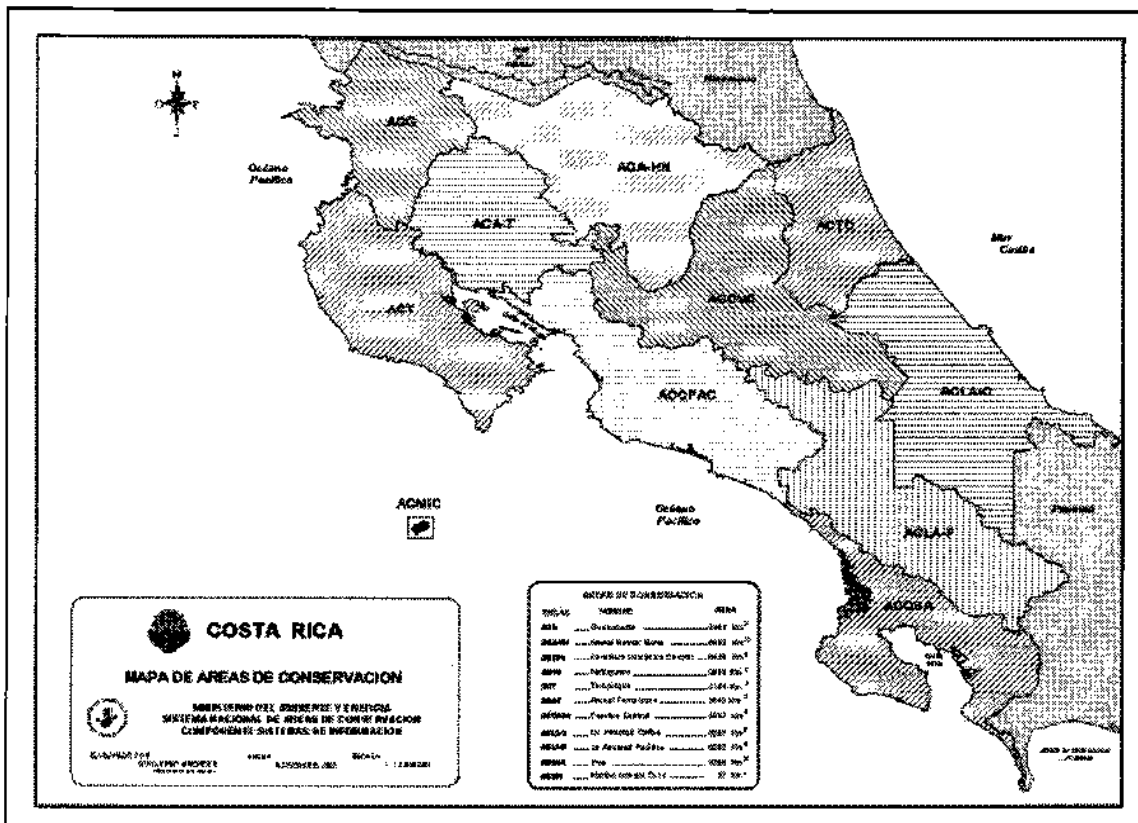
²² COP Decision VII/28, 2004.

²³ Article 6 of the Convention establishes the need for signatories to design national strategies, plans and programs in line with the objectives of the convention.

I - 5. Institutional Context – for PA Management

29. Institutionally, Costa Rica's national Protected Areas System is administered by the *National System of Conservation Areas* (SINAC - *Sistema Nacional de Áreas de Conservación*). For an overview of SINAC's organigram, please see Section IV: Part VII, Figure 4. SINAC is part of the institutions under the authority of MINAE and is required by the Law on Biodiversity (1998) to administer the country's forest resources and manage its protected areas (see section I-4). SINAC has a central administrative system, which - in spite of recent de-concentration efforts - still depends on MINAE for its budget and procurement. In 2004 SINAC's budget was US\$ 21 million, of which approximately US\$ 14 million (or two thirds of the total) correspond to the budget allocated by the central government and US\$ 6.6 million came from the National Parks Fund as a result of admission charges and other national park services, mainly taxes and fees. By geographic area, 58% of such revenues are generated in the Central Pacific, by Manuel Antonio National Park and in the Central Volcanic Range, by Poás and Irazú National Parks.

Map 1. – SINAC's 11 Conservation Areas



30. The superior decision-making body is the *National Council on Conservation Areas* (CONAC - *Consejo Nacional de Áreas de Conservación*), which is presided by the Minister for Environment and Energy. It is administered by a Superior Director, a sub-director and three line managers (for Planning, Natural Resources Management and Protected Areas), in addition to a Human Resources and Financial Department. Map 1 above illustrates how SINAC is composed of eleven regional administrative units (Conservation Areas), which together cover 100% of national territory (terrestrial area). Ten of the conservation areas are continental and the eleventh is Cocos Island (Isla del Coco) which is a marine conservation area. A total of 160 individual PA sites are located within each of these Conservation Areas.

31. Each of the 11 Conservation Areas is managed by a regional director which manages resources and personnel not only in charge of protected areas, but also of natural resources outside the protected areas regime. These Conservation Areas are then divided into sub-regional offices which oversee park

managers. Since not all protected areas have permanent staff on the ground, these are instead managed at the sub-regional level. Each of the 11 Conservation Areas has varying degrees of autonomy and several have developed their own trust funds and externally funded programs and projects. The distribution of PAs and their size varies significantly from one Conservation Area to the next. Some Conservation Areas harbour large protected areas of international importance for their global environmental benefits, such as the Guanacaste (ACG) and La Amistad (Pacífico –ACLA-P-and Caribe-ACLA-C-) Conservation Areas. On the other hand, there are Conservation Areas with PAs of smaller extensions, but a higher number of parks to manage, as in the case of ACT (*Area de Conservación Tempisque*) and ACOPAC (*Area de Conservación Pacífico Central*). Out of a total of 160 PAs only 9 have completed their management plans, while a total of 12 are currently in the process of developing site management plans. Several SINAC-wide programs are currently coordinated nationally such as the Forest Fires Control Program, the Illegal Logging Program, the Biological Corridors and Sustainable Tourism Programs.

32. SINAC has a total staff of 1102 employees. Among these, 826 staff members are paid directly through the Ordinary Budget provided by the MINAE. Another 176 staff members are paid through the National Parks Fund, which is a parallel trust fund administered by SINAC. The remainder of about 100 staff members is paid through public and private foundations, including the National Parks Foundation (*Fundación de Parques Nacionales*). Beyond SINAC staff, an additional 117 people are employed by other entities within MINAE. Hence, over 10% of SINAC's actual payroll goes to support other ministerial offices and activities, which are not related to PAs. Some 8% of the total SINAC staff (1102 people) is located in central offices, 50% is located in regional offices of the 11 Conservation Areas, and the remaining 42% is assigned on the ground for PA management. Of total SINAC staff, very few (9) have university degrees. Most have been trained as park wardens, with only limited training in tourism, despite a growing number of routine tasks by Park managers related to attending tourists.

33. A PDF B study was carried out by the Tropical Science Centre (TSC) aimed at applying *the WB-WWF Management Effectiveness Tracking Tool (METT)*. A sample of 26 specific PA sites was selected from the 160 public protected areas in the country under seven different management categories. The selected PAs protect different types of natural and cultural resources including: (i) Coastal and marine ecosystems on the Pacific Ocean and the Caribbean Sea; (ii) tropical dry forests; (iii) rainforests located between sea level and 500 meters in altitude; (iv) cloud forests above 1,500 meters in altitude; (v) wetland ecosystems; (vi) archaeological and historical sites; (vii) and areas of interest for tourism. As part of the sample of selected PAs there are areas which have had on-site government personnel for over 30 years and others without any government staff. The sample group also includes areas proposed to be part of the upcoming IDB-sponsored *Sustainable Tourism Programme*. The PA selection thereby reflects not only the significant importance of this new initiative to SINAC, but also that it constitutes one of the main co-financing partners of this said proposal, as it seeks to strengthen tourism in 10 PAs in the country.

34. The analysis of the METT results reveals that: (i) PAs within management categories that have received institutional support from SINAC - such as National Parks (Category II, indirect use) - show the highest percentage of management effectiveness; and that (ii) management categories with direct use (categories IV and VI) - including Forestry Reserves, Protected Zones and Wildlife Refuges - show the lowest percentage of management effectiveness. The study also shows that there are a significant number of threats to existing natural resources within PAs, of which many are difficult to manage, such as: (i) Expansion of the agricultural frontier; (ii) pollution of river courses and wetlands; (iii) biological isolation; (iv) tourism activities; and (v) illegal hunting. This management challenge requires a change in the existing institutional leadership, in order to develop strategies that tackle such problems in a concerted effort, in collaboration with other institutions and/or organizations in the country. Another important finding is that the number of staff employed by the assessed sites does not match the needs required for all management activities. All areas operate below current staffing requirements. According to the number of staff assigned to the areas in this assessment, one can easily make the inference that criteria for assigning personnel on the basis of priorities are not in place. Personnel currently at the PA site level lack

the necessary skills to carry out activities that nowadays require different management approaches, such as: (i) participation by civil society organizations; (ii) visitor management; and (iii) research and monitoring of biological resources, amongst others.

35. Overall, the METT findings show that PA Management planning is deficient and that the majority of sites assessed (19 out of 26) do not have management guidelines for the mid- and long-term, such as Management Plans. Corresponding Annual Operating Plans are not carried out in accordance with resource availability, since none of the wildlife protected areas complies with annual work plans, due to deficiencies regarding human and financial resources available. Moreover, the management of natural resources within PAs is not being carried out on the basis of technical and scientific knowledge in accordance with conservation objectives. There is a lack of information for decision-making, since there are few research, monitoring or evaluation programs focused on site management. Finally, the allocation of financial resources generated by PAs themselves encounter administrative and legal obstacles inherent to Costa Rica's public administration. Given the centralization of financial resource administration, their allotment is not targeted to field requirements, nor is there an efficient financial management process.

I - 6. Stakeholder Analysis

36. The following is a brief introduction of the main actors. Section IV Part III provides more details, along with a description of their main roles both in PA management and in the proposed project. At the *national level*, beyond the formal national institutions mandated by Law to administer protected areas, there is a considerable number of other stakeholders involved in and around *in situ* conservation in Costa Rica. The internal players within SINAC include the SINAC Director, the Directors of Conservation Areas, the National and Regional Conservation Area Councils, down to the local park manager - and other institutional players, such as CONAGEBIO and FONAFIFO. At the inter-sectoral level, likely project stakeholders include the *Ministry of Agriculture* (MAG), the *Institute for Tourism* (ICT), the *Institute for Agrarian Development* (IDA), and ICE (Instituto Costarricense de Electricidad).

37. Articles 23-33 of the Law on Biodiversity created a series of consultative bodies, such as the *National and Regional Councils for Conservation Areas*. These councils constitute a strong potential for a meaningful participation of civil society in the management of the PA System. *The National Council for Conservation Areas* (CONAC) is headed by the Minister of the Environment and represents the highest decision-making body in SINAC. Although the Law on Biodiversity gives the National Council important attributions, the legal uncertainties created by a Constitutional Appeal weakened their role. Hence, the CONAC has only had three sessions since its creation in 1998. Yet, following the recent dismissal of the Constitutional Appeal, concrete opportunities for social participation in decision making processes concerning PA management are now a real possibility.

38. At the *regional level*, the Law on Biodiversity contemplates the creation of *Regional Councils for Conservation Areas* (CORAC), which are to be presided over by the SINAC Regional Director. They are also to potentially involve a wide range of key stakeholders with direct relationship with PA management, such Municipalities, Local Environment Commissions, Indigenous and Community Associations, as well as local water utilities and other local players. Other key regional stakeholders with direct relationship with PA management are the Municipalities, NGOs, Local Environment Commissions, Indigenous and Community Associations, as well as local water utilities and other local players. Concerning indigenous populations, the **Indigenous Peoples Law** of 1977 (*Ley Indígena N° 6172*) enables the creation of indigenous reserves. It also contemplates particular tenure arrangements and norms for the use of land and natural resources within their boundaries. As such, these indigenous reserves are not considered part of SINAC's PA System. Yet, there have been instances of overlaps between the reserves and the

demarcation of PAs, which have led to boundary modifications.²⁴ Indigenous populations are located for the most part in the Talamanca range, and therefore have a key role to play in managing the largest remaining portion of montane forests in Costa Rica.

39. With regards to NGOs, many have been involved with conservation and PA management issues, developing activities such as the formulation of management plans and proposals for PAs (CCT, TNC, and CI), research (OET), environmental education (UCR,UNA, and *Fundación Neotrópica*), awareness raising, training (including the organization of courses for rangers such as UCI-ELAP), and policy advice (CEDARENA and UICN). INBio - as the National Institute for Biodiversity - is also a key stakeholder, as it has become a key depository of scientific knowledge on the distribution and range of biodiversity in Costa Rica, working as a key intermediary between SINAC, public universities and international donors. Many of these NGOs and research organizations have contributed significantly to the advancement of PAs and the conservation and use of biodiversity through studies and consultancies regarding diverse issues (social, economic, environmental). The private sector is another key player in in-situ Conservation in Costa Rica. The Network for Private Reserves (*Red de Reservas Privadas*) brings together over 100 private reserves and has played a key role in developing ecotourism destinations, compatible and complementary to the public SINAC PAs. Other key stakeholders are the Chambers of Commerce in Tourism and other environmental friendly enterprises, which have developed opportunities for providing non-essential services in public and private parks, as well as a variety eco-tourism destinations and packages that include visits to PAs. At the *individual PA site-level*, Local PA Councils (LPACs) provide a promising scenario for local coordination with participation of municipal governments, local councils, farmer associations, NGOs, and local communities.

Part I B: Baseline Course of Action

I - 7. Main threats to biodiversity within the Protected Areas System

40. Despite the viability of the protected areas approach for conserving Costa Rica's biodiversity endowment – much of which has global significance – various pressures both within the PAs and outside in the surrounding landscapes are currently undermining the long-term sustainability not only of the individual PA units, but of the overall PA System. Notably, there is a tendency in the country towards an ecosystem decline. In the near future, this systemic degradation of ecosystem processes will increasingly threaten the PAs, as the latter depend on the long-term viability of these ecosystems for their ecological integrity. This is evidenced in a reduction in the country's forest cover (in terms of absolute surface), although this loss has proportionally occurred to a greater extent outside PA boundaries. Table 22 in Section IV: Part V provides the relative intensity and tendency of the most important pressures on biodiversity within the PAs and in their surrounding landscapes as per Costa Rica's 7 eco-regions. Moreover, Section I-1 provided an overview of the status of Costa Rica's species in terms of their levels of vulnerability and endangered status. These trends result mainly from the following 4 clusters of threats, which bear directly or indirectly on the long-term viability of the PA system.

41. *Habitat degradation* primarily concerns (i) forest fires; (ii) water/coastal pollution; (iii) wetlands drainage and sedimentation; and (iv) human settlements and activities. For instance, forest fires from poorly managed fires used for land clearing for agricultural and livestock activities has caused forest cover loss within PAs, particularly in the Central America Dry Forest of Guanacaste National Park. Notably, all these kinds of pressures are on the increase in the PAs situated in the Central American Dry Forest, the Isthmian Pacific Moist Forest, and the Pacific Mangrove Forest eco-regions. For instance, the use of surface water for intense irrigated agriculture in the Tempisque Valley has reduced the ecological

²⁴ The best documented case has been the International Park of La Amistad (PIA) where some 7,500 Ha were segregated for the creation of indigenous reserves in Southern Costa Rica (*Contraloría General de la República. 2002*).

baseflow, which threatens the viability of Palo Verde National Park as a wetland of international importance. Human settlements and activities pertain mostly to infrastructure, such as highways and roads, which is inappropriately located either in or too close to environmentally vulnerable areas, along with non-conservation friendly tourism. Notably, these pressures are already ranging from medium to high in most of the eco-regions. Given that the tendency shows how they are also increasing, especially these kinds of tourism are likely to result in visitation beyond the carrying capacity of the involved areas.

42. **Habitat substitutions** are another major site-specific threat to biodiversity within PAs, where (i) native forest is replaced by either plantations or crops, while (ii) wetlands are substituted with tourism facilities and aquaculture ponds. For instance, forest plantations using exotic species - although intended to be environmentally friendly - in some cases have caused the substitution of native forests. This, in turn, has led to the destruction of habitats and ecosystem fragmentation, thereby increasing species loss and producing genetic impoverishment of forest ecosystems. Costa Rica has become an international tourism attraction with over 1.5 million visitors in 2004. There are growing pressure from the development of beachfront property and large resorts, particularly in coastal areas. Coastal wetlands - mangroves in particular - are also increasingly substituted by shrimp farms and other aquaculture activities, as in the case of the Térraba Sierpe National Wetland. These pressures are very much an increasing threat to biodiversity, primarily in the surrounding landscapes of PAs in the majority of the eco-regions. A rise in these kinds of threats is also noted within PAs in the Pacific Mangrove Forest, Isthmian Atlantic Moist Forest and the Volcanic Range and Talamanca Mountain Forest eco-regions.

43. **Over-harvesting of forest products** involves: (i) either selective legal or illegal logging, (ii) extraction of flora and fauna; or (iii) unsustainable hunting/fishing. Unsustainable logging at both the industrial scale and by small local forest owners has degraded native forest and increased habitat fragmentation. Plant and animal extraction - including the collection, hunting and trading of native and endemic flora and endangered fauna - has depleted some stocks of fauna, particularly in the Central Pacific region where the ACOPAC Conservation Area is located. Notably, these pressures are only an either small or moderate problem within PAs, where the largest pressures are found in PAs in the Isthmian Atlantic and Pacific Moist Forest eco-regions. However, generally these pressures are of much more concern in the landscapes surrounding the PAs. Concerning unsustainable hunting/fishing, wildlife poaching and trade occur covertly, mostly in PA under less stringent management categories (Forest reserves, Wildlife Refuges). Not enough law enforcement personnel within PAs coupled with a general insufficient knowledge of the legal consequences of poaching have made controlling these activities a difficult job. It is also acknowledged that the existing penalties for the poaching of wildlife are exceedingly soft and cannot be deterrent especially considering the high commercial value of wildlife parts and products in the international market.

44. Finally, PA habitats are being negatively impacted by **extreme natural events**. In addition to the above anthropogenic pressures, Costa Rica and the rest of Mesoamerica is increasingly afflicted by extreme geologic and climatic events that cause important impacts on the natural resources of the region. Some of the events that affect the most are hurricanes (causing floods), drought related to the El Nino phenomenon (which contributes to the above forest fires), and earthquakes (resulting in landslides).

45. While the **underlying causes** of these threats to biodiversity within PAs vary from one eco-region to another, many of these threats stem from the fact that the landscape structure in the country is driven almost exclusively by market forces and that the overall regulatory framework for land use does not fully incorporate biodiversity conservation concerns that are based on sound scientific data and bio-regional scale conservation strategies. The threats also stem from important **systemic underlying causes**. Thanks to the findings of GRUAS II, it is increasingly acknowledged in Costa Rica that there is insufficient theoretical and practical knowledge in approaches for **holistic ecosystem management** (SINAC-MINAE, 2006), stemming from a poor national vision on territorial integrity. Notably, an increase in threats to biodiversity is taking place both within the PAs and in their surrounding landscapes, exerting pressures on

critical links in the landscape which contribute to the ecological viability of PAs. For example, the Caño Negro Wildlife Refuge is an important wetland in Northern Costa Rica, which has been experiencing increased habitat loss, due to sedimentation and reduction in river discharges. Land use practices upstream and climate variability have contributed to threatening the long term viability of this wetland. Another example is the loss of landscape functionality in buffer zones and biological corridors, which lessens the viability of maintaining biodiversity over the long term.

46. In response, an ongoing academic discussion in Costa Rica concerns the ecological viability of biological islands within PAs, surrounded by a production landscapes which offer limited opportunities for connectivity, stepping stones and other agents of biological dispersion. One key underlying systemic factor is that the existing design of PA management often does not respond to the basic characteristics and conservation objectives of a PA System. This has led to habitat fragmentation and ecosystem degradation, i.e. reduction of the landscape's biological functionality outside the PAs. These systemic underlying factors are allowing for the above threats to have various biological impacts on PAs, such as: Loss of key habitat, loss of landscape functionality, limited effectiveness of biological corridors, threats to genetic resources of interest in terms of food security, unprotected endemic species, drop in populations of commercial interest species. Notably, the situation is more complex in marine/coastal ecosystems, mostly due to the lack of awareness about the biological impact of overexploitation and the lack of conservation measures that clearly respond to the functionality of certain key ecosystems.

I - 8. Opportunities for consolidation of Costa Rica's Protected Areas System

47. Costa Rica faces an apparent paradox. On the one hand, it has an extraordinary endowment in biodiversity, and has spared no effort to promote itself as a country, which effectively protects a quarter of its territory and as one of the world's foremost eco-tourism destination. On the other hand, the State struggles with the pangs of growth of a national Protected Areas System, which over the past decades has expanded with subsequent requirements in human and financial resources. Moreover, increasingly, the ecological viability of the existing network of public protected areas and private reserves hinges on biophysical processes that go beyond the boundaries of protected areas. Hence, the long-term ecological viability of Costa Rica's Protected Areas System will to a large degree hinge on its capacity to improve its current design and geographical configuration.

48. With this goal in mind, there is a need to link some of Costa Rica's existing innovative approaches to environmental management - such as environmental service payments, concessions for non-essential services and bio-prospection - with a more effective management of its Protected Areas System. Yet, SINAC has been increasingly hamstrung by often contradictory legislation, competing institutional mandates, insufficient institutional capacity and complex financial mechanisms to access public funds. Innovation has taken place, but mostly outside the SINAC Protected Areas System. Moreover, as illustrated by the financial analysis in Part VIII, the resources available for SINAC's day-to-day management of PAs are stagnating, and in some cases decreasing. This paradox contributes to a downwards spiral, which threatens the long-term ecological viability of the PA System, as well as SINAC's institutional sustainability and financial solvency. While considerable efforts have been directed to applied research and environmental education, the role of protected areas in the making of Costa Rica's development model has been under-estimated and often neglected. This project aims at addressing these limitations by harnessing the true potential of Costa Rica's PA System as a contributing driver of sustainable development.

49. SINAC has considerable advantages in its current territorial division - with its 11 Conservation Areas - which effectively cover the entire country. However, urgent institutional reforms are needed to improve SINAC's ability to increase its revenues and deepen its mandated regionalization and decentralization process. In this regard, there are considerable opportunities for linking local development

initiatives - particularly linked to eco-tourism - to the long-term management of protected areas in Costa Rica. The national economy is increasingly geared around a growing tourism industry. Yet, although Costa Rica has established itself as a major international eco-tourism destination, it still faces a number of challenges to strengthen linkages between sustainable forms of tourism and the PA System. Converting a larger proportion of Costa Rica's PAs into tourism attractions can provide opportunities not only for SINAC to harness additional revenues and improve its capacities. This is the rationale behind the IADB-SINAC Sustainable Tourism Programme. As mentioned earlier, such a move can also constitute a source of local employment and business opportunities for neighboring communities.

50. This project will therefore seek to increase the functional linkages between a sub-set of PAs and the eco-tourism industry, creating opportunities both within and outside protected areas. This emphasis will also enable to effectively link the PA System to the provision of environmental goods and services, including those related to provision of tourism attractions and recreational opportunities. As such, the project will provide technical assistance to SINAC to conduct land planning processes at the regional (Conservation Area) and local (Park Administration) level, in order to facilitate greater participation of PAs in local development processes, by using formal participation instruments and enhancing existing consultative bodies, at the regional and municipal levels.

51. Finally, the main goal of this project is to consolidate and strengthen Costa Rica's Protected Areas System. To implement this approach, it will be necessary to redefine Costa Rica's conservation goals, which, in turn, will require a new configuration of the existing Conservation Areas within SINAC, instead dividing them up more according to functional and administrative criteria. Additionally, recommendations from almost completed GRUAS II process have suggested the modification of the management categories for specific protected areas and their adaptation to incorporate these eco-regional planning criteria. This process will help defining the conservation goals and objectives for Costa Rica and the PA System, by which to achieve them. This implies analyzing the PA System as a whole, and identifying mechanisms for integrating into the PA System both public and private lands in the long term.

52. Through assistance from this Project, the GoCR will seek to settle the legal status of privately-owned, non-expropriated lands within protected areas, by envisioning innovative public-private partnerships for conservation. The project will also help ensure the sufficient financing for SINAC to address this matter sustainably in the long term. By the end of this project, functionally defined biological corridors will be operating under duly harmonized, responsible public-private management models, linking different components of the PA System through biological corridors and the new revised PA management categories. Gaps in the ecosystem representativeness will also be addressed, of which the process and necessary steps will be captured in the project-supported SINAC Strategic Plan and PA System Strategic Action Plan (project outputs 1.3 and 1.4). Another related element will be the definition and implementation of a marine/coastal conservation sub-system, through priority measures – including management plans and other land use planning tools.

I - 9. Barriers to the envisioned Protected Areas System consolidation

53. A set of barriers currently hampers Costa Rica's efforts to develop and improve on its PA management system, to achieve the aforementioned goals. These barriers need to be removed to overcome existing management deficiencies in SINAC, while contributing to the sustainability of PAs and their operation within the framework of the national PA System. The below provides a synopsis of the identified barriers.

54. **BARRIER 1 - Costa Rica's current complex and incomplete legal and policy framework limits SINAC's operational ability.** Effective PA management in Costa Rica is hindered by a deficient and often contradictory legal framework. Under the current legal framework PA management categories are not clearly defined and hamper the setting of conservation goals. Moreover, the *Law on Biodiversity*

(1998), which created SINAC, envisioned a *decentralized* environmental management system. Yet, the constitutionality of the Law was challenged from its onset. Hence, since 1998, SINAC has been operating in a legal vacuum. Moreover, this legal battle belies two conflicting visions of how conservation should be managed in Costa Rica, between, on the one hand, a centralized PA System model versus, on the other, a more decentralized approach. The latter supported that subsidiary/consultative bodies (such as Regional Conservation Area Councils) could be handed environmental management responsibilities. In September 2006, the legality of the Law was finally upheld, thereby approving the key role of consultative bodies in PA management. For instance, Article 39 now provides Regional Councils with the approval of concessions and other non-essential services. Yet, SINAC still depends on the central authority of MINAE for all contractual purposes, procurement and financial transactions, which leads to extremely slow and complex administrative contracting processes.

55. Legally, *revenue generation* by SINAC is also severely limited. At present, all state revenues are concentrated by the National Treasury. Consequently, most of SINAC's PA revenues are channeled through the central-level Single State Treasury ('*Caja Única*'), where only a very small percentage is returned to SINAC and re-invested in the PAs. Even though the new water fee (*Canon de Agua*) will increase SINAC's income flows, SINAC's annual budget size largely depends on its *spending* capacity. These time-consuming institutional processes result in *chronic under-spending*, which in turn continues to lead to increasingly smaller annual budgets. Additional potential income generation opportunities, such as tourism-related services, are also legally restricted. For instance, there is no legal basis for collaborative PA management in Costa Rica. There is therefore no integration of private conservation into the policy for management of public PAs. As a result, SINAC's considerable revenue generation is not reflected in its annual budget. It also has limited capacities to pursue income, manage funds and contract external services. Hence, SINAC's capacity to retain revenue, spend its budget and comply with its annual work plan is severely impaired.

56. **BARRIER 2 - SINAC's inadequate PA financing system and institutional capacity limits its capacity to capture revenue and invest in cost-effective PA management.** Structural deficiencies pose another critical set of barriers, preventing SINAC from linking its annual operational plans and budgets to its strategic goals. The above weak central-level budgetary planning and implementation has also translated into weak PA-level *operational* planning. The human and technological capital required to handle the PA-related economic and financial management requires upgrading in terms of knowledge and skills. Limited institutional capacity in SINAC is also reflected in its capacity to spend and use available resources effectively. Hence, while boasting a considerable potential for increasing its revenue capture, SINAC would require significant changes in its administrative structure, budgetary planning, along with a complete revision of entrance fees and other sources of revenue. Current budget *allocated* Government resources for PA management are not sufficient to meet basic operational standards in many of the PA units (see above barrier).

57. Land tenure and uncompensated private owners in State-run PAs remain a critical barrier for SINAC's financial outlook. Latest estimate indicates that unpaid land in PAs amounts to over USD 76 Million. As a result of legal obligations, around 4% of SINAC's annual budget is earmarked for paying for unpaid land declared as public PAs. Moreover, an additional USD 17.7 million is required beyond the existing budget to cover all PA System administration costs (SINAC 2003). While initial efforts are underway to improve the cadastral information for State-owned PAs, important needs exist in terms of legal information management. Another legal impediment with financial implications for SINAC concerns existing trust funds, such as the National Parks Fund, which constitute a key PA financing component. Yet, as financial speculation with public funds is legally prohibited, these trust funds are limited in terms of their yield and scope. Moreover, most of these trust funds are not managed by financial experts, thus foregoing opportunities for a more sustainable design for SINAC's financial system. This is related to the lack of consistent financial planning pervasive in SINAC, as investments in Trust Funds are not planned alongside PA budget and expenditure planning. Long-term financial

considerations are therefore not integrated into the overall cost and expenditure structure of the PA system. Finally, SINAC has the potential of increasing its resource capture, through more effective tourism and visitation-related resource generation mechanisms. Yet, this calls for an overall *system-wide* PA System Resource Generation/Financing Strategy, which currently does not exist.

58. **BARRIER 3 - Individual capacity deficiencies of SINAC field staff limit the PA management effectiveness.** A number of operational deficiencies also impede more effective PA System management. Despite its decentralization mandate, SINAC remains a highly centralized entity. In general, the regional and municipal authorities have a low capacity to plan, implement, enforce and monitor their conservation management responsibilities. In fact, the institutional effectiveness and relative autonomy of the 11 Conservation Areas is severely constrained and effective PA management is compromised, due to *de facto* centralized policy decisions. In addition, Costa Rica adopted structural adjustment policies to limit public spending in the late 1980s, leading to a hiring freeze of new SINAC staff. The mean age of SINAC's field staff is therefore higher than the public sector average.

59. According to a PDF B METT application study, weak strategic planning at the central level is also reflected at the level of individual PAs. For example, only 9 of the 160 PA units have a Management Plan under implementation. Furthermore, only 13 of the 25 sampled PAs had more than 50% effectiveness. One of the weakest elements is *enforcement*, with only 50% of the PAs having permanent surveillance, primarily due to limited availability of funds and practical experience. With regards to *coordination*, at present each PA entity performs their functions in an isolated manner, creating inefficiencies and lost opportunities for developing synergies across PAs and stakeholder groups. It is clear that the total cost of managing SINAC's PA System is not adequately covered, and those Conservation Areas or PAs, which are unable to raise additional project funds, are often faced with severe limitations in terms of staffing and resources. In practice, only 26% of the PAs within the System have at least one ranger on a regular basis. Still, park rangers are required to undertake a multitude of tasks, of which many are often unrelated to conservation (i.e. attending tourists). Notably, SINAC is not only responsible for conservation, but also for environmental management on land outside PAs, including forest concessions, use permits and other enforcement functions.

60. PA-level staff also has limited capacity and awareness concerning how to interact with local community leadership. This especially concerns how to engage them in partnerships to improve the PA management effectiveness, while also reducing local environmental conflicts and providing economic opportunities for local communities. There is limited experience within SINAC with how to administer collaborative management arrangements and agreements, specifically with local communities and NGOs. As mentioned above, there is currently no legal basis for such agreements, in spite of a national policy on collaborative management of public protected areas. Hence, to date, most existing areas of collaboration between PA and local arenas are conducted through voluntary arrangements, NGO and municipal government commissions and other ad-hoc initiatives.

61. **BARRIER 4 - Low awareness of the role and importance of PAs in national economic development, and a lack of integration of PA into Costa Rica's growing tourism industry.** Another barrier is that PAs are largely under-valued in Costa Rica. Funding for PAs is considered a cost rather than an investment in development, even though tourism - which is closely linked with PA visitation - accounts for 7.4% of the GDP. This view is rooted in a relatively low general national awareness of the value of biodiversity in general, PAs in particular and on the long-term effects that loss of ecosystem integrity can have on livelihoods. For instance, despite a rapid growth in Costa Rica's tourism, not enough tourists visited PAs. Insufficient promotion of PAs as tourism attractions, combined with a lack of access to and adequate infrastructure within PA all contribute to limited revenue generation. There is also a growing gap between the range of services provided by the tourism sector, particularly in PAs, and the international promotion of Costa Rica as a world-class tourism destination. Moreover, while important achievements in sustainable tourism in Costa Rica (i.e. national certification) have gained international recognition, the full potential of the PA System as a major tourist attraction has yet to be harnessed.

62. Several important challenges remain: (i) *Tourism visitation is geographically concentrated* – Out of the 39 PAs with the greatest tourism potential, only six of them²⁵ account for 86% of total visitation. The remaining 33 PAs offer a wide range of potential tourism attractions, but are unable to offer minimal conditions and infrastructure for tourists. (ii) *Insufficient linkages between PAs and local livelihoods* - Small and medium enterprises related to tourism-related goods and services provisions can play a key role in generating local employment and reducing poverty level in areas surrounding PA. Yet, to date, this potential remains untapped. (iii) *Limited capacities to engage local stakeholders through PA management planning* - There are limited capacities for managing tourism-related activities within State-run PAs. Furthermore, so far there has been little or no coordination between SINAC, the Costarican Tourism Institute (ICT), the private sector, municipal governments and local communities. A greater integration between these stakeholders would contribute to increase business opportunities and employment in and around PAs, thus reducing impacts and threats on PAs. (iv) *The financial sustainability of the PA System depends on increased revenue capture* - Promoting greater tourism access to PAs, improving infrastructure and service provision could contribute to increasing state revenues, and thereby to long-term PA System financial viability. There is, thus, a need for harmonized methodological approaches to PA valuation and the incorporation of this into awareness building campaigns and funding strategies. Moreover, an active awareness-raising strategy - both among policy makers and the general public - would help overcome this awareness barrier.

63. **BARRIER 5: Deficiencies in ecosystem integrity, connectivity and representativeness.** The PA System covers around 25% of Costa Rica's total land surface. Yet, currently, ecosystem representativity within the System is skewed, with certain ecosystems (such as montane forests) fully represented, while others are severely under-represented (seasonal moist forests, marine and coastal ecosystems). Furthermore, certain PAs - particularly those harboring freshwater ecosystems such as riparian forests, mangroves or wetlands - are exposed to deterioration due to habitat change and pollution. Even some of the largest PAs are too small for long-term viability and preservation of ecological integrity. Moreover, some areas are found in isolated patches preventing free movement or genetic flow between PAs. Hence, the intrinsic value of the ecosystems under protection is increasingly lost. In response, according to the GRUAS II promoted eco-regional approaches, about 75% of the PAs would require changes to be ecologically viable. These changes to the PA System design would involve reviewing the existing PA boundaries. It would also require mechanisms to improve buffer zone management, particularly along biological corridors, and to promote environmentally friendly activities in the production landscape. PA management categories would also need a review, as the original designation was unrelated to ecological requirements. Hence, some areas that should be subject to strict protection are not designated as such.

EXISTING POLICY

II - 1. Project Rationale and Policy Conformity

64. Despite the considerable contribution of the existing baseline activities, ecosystem conversion of forest and watersheds and habitat fragmentation, will continue to take place in Costa Rica's PAs. This will result in concomitant loss of biodiversity and hence, substantial global benefits. The above-described policy, legal, operational, capacity-related and knowledge barriers will continue to hamper the management effectiveness of the PA System. Existing conservation efforts will clearly be insufficient to appropriately address the above combination of threats, barriers and limited capacities. Deficient knowledge and awareness among key stakeholders together with the identified capacity deficiencies would remain, contributing to resource deficiencies and low biodiversity rankings. A more comprehensive and integrated effort to improve management of the PA System is required to reverse current trends and establish alternatives in a timely manner. An *alternative scenario* would focus on removing key barriers to the sustainable management of Costa Rica's protected area system by strengthening SINAC's systemic, institutional, financial and individual capacities.

²⁵ Poás, Manuel Antonio, Irazú, Cahuita, Santa Rosa and Tortuguero.

Project Strategy

65. In recognition of the above pressures and deficiencies, and in line with recent policy decisions, the Government of Costa Rica has placed a high priority on the consolidation of its Protected Areas System. Given the extent of the challenge - and in recognition of the considerable global benefits that could be captured through its enhancement, the Government has requested UNDP assistance seeking GEF support to overcome the barriers that undermine the sustainability of the current protected areas and to provide the framework in which a broader system involving both terrestrial, coastal and marine areas can grow.

66. As mentioned in paragraph 21, a recent court decision pertaining to the Law of Biodiversity makes the present an opportune time to propose a new system-wide strategy for the long-term *in situ* conservation in Costa Rica. The focus of the proposed GEF Alternative will be to set up the enabling legal, policy, and institutional framework for the PA System that will increase the effectiveness on the ground action. The Project will complement the planned initiatives of the SINAC-ICT-IADB Tourism Programme and SINAC-TNC by adding the global environmental increment to these partnerships. Moreover, the Project will also work very closely with other planned and ongoing national and regional GEF biodiversity projects – such as the WB-GEF Ecomarkets II and regional WB-GEF MIE Projects – by leveraging increased impacts from project-specific, on-the-ground pilot actions and innovative approaches to strategically selected issues.

67. The project will adopt a state-of-the-art systemic approach to promote the consolidation and strengthening of a representative PA System for SINAC that reflects the new political, management and environmental trends in the country and globally. The outcomes of the Project reflect the need to distinguish systemic-level interventions, from institutional strengthening and PA-level local pilots. At the systemic level, the project will contribute to updating of the existing regulatory and legal framework. This, in turn, will require the development of appropriate inter-institutional coordination mechanisms between SINAC and the rest of the public sector. The project will also develop, with SINAC, a system-wide Funding Strategy and a related Business Plan. At the institutional level, the Project will support the institutional re-alignment of SINAC, including: (i) The definition of posts and functions necessary to fulfil its role as the lead PA System institution; (ii) The definition of minimum staff requirements; (iii) recommendations for hiring of new/additional personnel to modify or enhance team capacity; and (iv) the adoption of adequate planning and management processes. This, in turn, calls for the development of individual skills and capacities, through targeted training programs.

II - 2. Project Goal, Objectives, Outcomes, Outputs and Activities

68. The long-term national **Goal** of the full GEF project is: “*Consolidating the Protected Areas System as a key component of sustainable development in Costa Rica.*” The **Objective** of this project is: “*to overcome the major systemic and institutional barriers to sustainability of the Costa Rican Protected Area System.*”

69. By aiming for this Project Objective, the planned project activities contribute to the Goal in at least seven ways:

- They provide a replicable model for a national PA System and related enabling institutionality that integrates multiple PA types into one coherent whole;
- The model also demonstrates how this PA System is responding to and embedded in Costa Rica’s broader national de-concentrated planning process;
- Management effectiveness is improved in public PAs at a national level;
- A contribution is made towards improved bio-geographic representation in the national PA System;
- PA management Practices will be augmented by establishing paradigms for agreements concerning collaborative management arrangements of protected areas, concessions of non essential services which may be replicated in other PAs - both within Costa Rica and elsewhere in the LAC region;

- These activities will be enhanced and consolidated through the introduction and utilization of creative sustainable financing mechanisms.
- Combined, these contributions will address critical management and coverage gaps of the PA System, which in turn will further improve its status – hence, contributing towards its maturation.

70. A brief synopsis of the project outcomes is described below along with a suite of planned outputs. A one-page overview matrix is provided in Part II: Project Logical Framework.

OUTCOME 1: Costa Rica’s legal and policy framework is reformed and enhanced to ensure effective management and long-term financial and ecological sustainability of the PA System (PAS)

Total Cost: US\$ 2,017,544 (Co-Financing: US\$ 1,465,464; GEF Request: US\$ 552,080).

71. Globally, the long-term success and sustainability of protected area systems largely depends on a supportive legal, policy and institutional framework. Thus, Outcome 1 will provide a *systemic* framework for building on the **Biodiversity Law**. Activities will address key missing elements and structures required to give optimal effect to existing legislation. Namely, Outcome 1 will provide the legal and policy support - along with the strategic vision - for the institutional re-alignment and strengthening process of SINAC. A Strategic Plan for the overall National Conservation Areas System (SINAC) will be developed, along with a National Policy and a Strategic Action Plan for the national-level Protected Area System within SINAC. The combination of these systemic tools will provide the blueprint for the enhancement and consolidation of Costa Rica’s protected areas. **The PA System Action Plan will be for the PA System and its management alone** and will define actions to achieve the PA System’s goals, identify prioritised actions and responsibilities, and establish a short, medium and long-term timetable for delivery of the actions. The Plan will further define the relevant regulatory and operational requirements to enable the implementation of the PA System in the short term, while guiding its expansion and sustainability over the mid and long term.

72. Costa Rica’s Law on Biodiversity was recently upheld by the Constitutional Court after 8 years of legal uncertainty. This provides a unique opportunity for SINAC to fully apply its existing legal framework. At the same time, a planned legal review will provide the basis for strengthening of the existing regulatory and legal framework to sustain the PA System. Costs associated with adoption of new legal framework and policies will be covered by the GoCR. In combination with IADB and TNC funds and efforts, GEF funds will contribute to the technical assistance required for developing proposals for the legal reforms. A clear distinction will be established between existing financial mechanisms currently administered by FONAFIFO and new financial arrangements for the sustainability of the PA System.

73. IADB will fund the technical assistance required for developing proposals for the planned legal reforms based on the detailed PDF-B studies and mechanisms to be tested through the different components of the project. IADB will also apply GEF-funded PA administration and management guidelines through the formulation of 10 PA management plans in priority PAs compatible with the PAs selected by IADB’s Sustainable Tourism Project (Output 1.4).

Output 1.1: A National Policy for a consolidated terrestrial and marine PA System is approved and in force

74. The Project will support the preparation of a National Policy for the conservation and management of protected areas. It will stress the need for the PA System to preserve and maintain key ecological processes that provide environmental goods and services. The formulation process will take its starting point in a clear definition of Costa Rica’s Protected Areas System to clarify its function as a sub-system

within the broader National System of Conservation Areas (SINAC) context.²⁶ The Project will support the consultation process to ensure consensus and a broad-based commitment from key stakeholders for its implementation. Moreover, the Policy will be based on biodiversity conservation goals for both terrestrial and marine ecosystems. Not only are these ecosystems under critical, pervasive threats, they are also currently under-represented in the existing PA System (see Section I-2). A key element of this Policy will therefore broaden the range of protected marine and coastal areas as part of a new sub-system to be established under the PA System. New marine and coastal conservation goals would be defined based on an integrated ecosystems approach, from which new marine PAs will be declared and created.

75. To achieve the above, the ecosystem functions - both within and around PAs - have to be an integral part of Costa Rica's territorial planning. These functions will therefore need to be incorporated into local PA management plans, municipal land use plans, along with regional and national territorial planning. Similarly, conservation priorities for Conservation Areas (the regional level) and new PA Management Plans (PA site-level) must reflect these regulatory ecosystem functions in order to guarantee the long-term provision of environmental goods and services. The project will promote greater technical coherence between these development plans and municipal land use plans through the organization of technical seminars, courses and by developing eco-regional planning guidelines. Hence, once the national policy is developed and endorsed by stakeholders, the Project will facilitate integrating this Policy into national policy frameworks and development plans.

76. Costa Rica has established an incipient legal framework for handing out concessions for service providers within PA. *The Executive Decree Nº 32357-MINAE*²⁷ of 2005, establishes a regulation for the Concession of Non-Essential Services within PAs managed by SINAC. In practice, the decree still requires increased capacity for outreach from SINAC to the private sector, particularly with regards to concessioning services within PAs. This implies not only a change in policy, but also legal reforms to produce the by-laws needed for the awarding of concessions. These by-laws will, in turn, serve to benchmark best practices in outsourcing non-essential services within PA, through contractual arrangements, adequate follow-up and evaluations.

Output 1.2: Prerequisite legal reforms and a PA re-categorization applied through local and regional planning instruments

77. To ensure the long-term sustainability of the PA System a complete, supportive and operational legal framework is required. For the Law on Biodiversity to be fully operational, a new by-law is needed. This by-law will provide the ground rules for the application of the Law through related management standards for securing the long-term biological viability and political governance of Costa Rica's PA System. This will require establishing clear rules of engagement with national and local stakeholders, and a SINAC policy for working with the private sector. Technical assistance will be provided to the GoCR to prepare and publish an Executive Decree containing the different by-laws pertaining to the implementation of Articles 22 through 43 of the Law. The Legislative Assembly is currently discussing a new Law on Protected Areas, a process which will continue during most of 2008 and hopefully the new Law can be enacted during 2009. The project will seek to influence these legal reforms to ensure that they enable improved design and implementation of a local and bioregional planning instruments for PA management.

78. As part of the ongoing decentralization reform process of SINAC through GRUAS II a new eco-regional management approach will be proposed for SINAC (see Section IV: Part VI). Such an approach will enable the institution to integrate its conservation policy into Costa Rica's broader development goals embodied in regional and municipal land use plans. A sound legal and technical framework is needed to

²⁶ The INBio PDF B Study has provided a proposed definition that will be used as a point of departure.

²⁷ "Reglamento para la Regulación de las Concesiones de Servicios no Esenciales en las Areas Silvestres Protegidas Administradas por el Sistema Nacional de Areas de Conservación",

integrate this model into SINAC's current administrative structure. SINAC already has the advantage of being divided into 11 decentralized Conservation Areas, which, in principle, could be adapted to eco-regional conservation goals. Building on this geographical advantage, the project will create eco-regional management units within each of the 11 Conservation Areas, combining where necessary PA-specific mandates and expanding platforms for integrated planning. To reflect the conservation priorities at the landscape level, the Project will provide new guidance and innovative legal mechanisms for the management of protected areas under diverse land tenure regimes (public and private)

79. Outside of the PA System SINAC has a limited mandate. Yet, it still has some scope for influencing external land and resource use through the distribution of the benefits that flow from the PAs. Working through established consultative bodies, such as the Regional Councils for Conservation Areas, the Project will assist SINAC in proposing new rules and regulations for the handling of concessions and private sector participation in PA management and related services. As well, it will advise on provisions for capturing rent from business activities generated within the system.

Output 1.3: A SINAC Strategic Plan (*Plan Estratégico*) officially approved and operational

80. Several key barriers are limiting SINAC's capacity to sufficiently adopt, apply and monitor the use of strategic planning tools vital for adaptive management practices. Hence, SINAC urgently needs a Strategic Plan that encompasses all the 11 Conservation Areas under its auspices and will provide a holistic blueprint for the consolidation, enhancement and management of SINAC as a whole. This will support the new eco-regional approach to PA management. In 2000, a first Strategic Plan for SINAC's institutional development was formulated. While SINAC, with TNC support, will finalize the formulation of a new, updated version of this Plan, this Output will assist in the adoption and *implementation* of the Plan. The implementation of the SINAC Strategic Plan will require a broad systemic approach, which will entail iterative planning exercises with SINAC senior management, technical staff and other key stakeholders. A special emphasis will be placed on conveying the Plan to national authorities and legislators and supporting the operationalisation of it in the 11 Conservation Areas. Moreover, the Plan will be the first step towards the implementation of adequate operational plans and the corresponding budgets. The below National Strategic Action Plan (*Plan Director Nacional*) (Output 1.4) will therefore be developed as a second step by providing the operational guidelines for this Strategic Plan.

Output 1.4: A PA System Strategic Action Plan (*Plan Director Nacional*) officially approved and operational

81. This Project will support SINAC in the formulation, official endorsement and short-term implementation of a National Strategic Action Plan for the consolidation of the PA System. As a long-term planning instrument, this Strategic Action Plan will be formulated so that it (i) designs a PA System that is consistent with the new eco-regional approach, Costa Rica's socio-economic context and based on efficient and modern management approaches and (ii) defines the fundamental guidelines for policies and strategic planning of the System and constituent PAs for the short (5 years), medium (10 years) and long term (15 years). This Action Plan will also be closely aligned with new National PA Policy and its adoption and application. Based on a broad consensus, the Plan will be based on a clear and officially agreed upon definition of what is understood by SINAC's PA System. As the guiding document of PA policies, the Strategic Action Plan shall also establish the main lines of action needed to achieve the long-term objectives. For each action, details of implementation arrangements and an indicative timetable will be defined. A phased approach will be adopted for the initiation of actions and for the inclusion of the results of ongoing tasks in the PA System. Both existing and new regulatory frameworks and policies shall be incorporated into the final document of the Strategic Plan.

82. As part of the development of the Strategic Action Plan, the Project will identify best practices for administration and management, to be followed by all public and private institutions participating in the